

2015 - 2016



# U.S. EPA-BHC COLLABORATIVE AGREEMENT ACCOMPLISHMENTS REPORT

## Summary

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This report summarizes the efforts completed under a 2015-2016 collaborative agreement between the U.S. Environmental Protection Agency (U.S. EPA), U.S.-Mexico Border 2020 Program and the U.S. Section of the U.S.-Mexico Border Health Commission (BHC), U.S. Department of Health and Human Services. The work accomplished under this agreement from September 2015 to September 2016 include the following highlights:

- Providing medical information and advice on environmental conditions that influence children's health along the border through the Pediatric Environmental Health Speciality Units.
- Conducting 6 promotores training courses over the past year in 6 cities along the Border covering a range of topics including asthma, pesticides, lead, water, and climate change. Two Children's Environmental Health Symposia addressed vector-borne disease including Rocky Mountain spotted fever and Zika.
- Leveraging binational expertise through active support and participation of EPA's Task Forces in meetings, sharing and reporting out on meeting discussion with stakeholders.
- Compiling environmental health data in a 2015-2016 report for the Arizona-Sonora border region.

## Background

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EPA and the BHC have committed to working more closely to advance environmental health priorities in the U.S.-Mexico Border Region. The collaborative agreement addresses some of the Border 2020 program fundamental strategies such as working to improve children's health and promoting environmental health. Since 2011, EPA and the BHC have worked to identify joint priorities and possible areas of collaboration. EPA and the U.S. Section of the BHC officially launched the [2015-2016 agreement](#) in September 2015 during the National Coordinator's Meeting and it can be found on the Border 2020 website. Key actions within the agreement include intra-agency collaboration during Border Binational Health Month (BBHM) in October, Children's Environmental Health Symposia, a State of the Border Environmental Health Report (to document status and trends), promotora trainings, and building environmental health capacity.

## **Program Collaboration Opportunities**

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The collaborative agreement identified three program areas and ten project priority areas as collaborative opportunities.

### **Program Areas of Collaboration**

1. Public Health and Environmental Leadership
2. Building Environmental Health Capacity
3. Strengthening Institutional Resiliency and Accountability

### **Project Areas of Collaboration**

1. Lead Environmental Health Efforts in the Border Region
2. Leaders Across Borders
3. Chemical and Pesticide Exposure Prevention
4. Pediatric Environmental Health Specialty Units
5. Community-based Health Border Initiatives
6. Air Quality and Asthma Education Awareness
7. Climate Change
8. Identify Project Funding and Leveraging Opportunities
9. Leverage Binational Expertise and Resources
10. Develop Public Access to Environmental and Public Health Data

A number of the project areas for collaboration are at different stages and will continue to be an essential part of the newly revised collaborative agreement.

## **Accomplishments**

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The summaries below provide details of accomplishments achieved under the 2015-2016 collaborative agreement. The highlights presented include the following general topics: chemical and pesticide exposure, education and outreach efforts, environmental and health data.

### ***Chemical and Pesticide Exposure Prevention***

EPA and BHC have partnered with border communities on numerous occasions over the past few years to develop strategies to identify sources of chemical and pesticide exposure and to implement programs to reduce exposure to lead, mercury, pesticides, and heavy metals in the environment. Efforts have included pesticide inspector training, pesticide safety classes for promotores, and stakeholder outreach. See descriptions below.

### **Worker Protection Standard implementation in Pauma Valley – Train the Trainer Workshop for Promotores**

On May 5, the Pesticides Office conducted a Train the Trainer workshop on Pesticide Safety for approximately twenty-five promotores (Community Outreach/Health Workers) in Pauma Valley, CA. The interactive four-hour session focused on the revisions to the Worker Protection Standard, highlighting the importance of preventing pesticide exposure and using an Integrated Pest Management approach to control pests in the home. Also participating were representatives from the California Department of Pesticide Regulation, the San Diego County Agricultural Commissioner's Office, the California Agricultural Labor Relations Board, and the University of California Pesticide Safety Education Program. The goal of this training is to inform the farmworker community about the

safety provisions under the Worker Protection Standard, and to empower them to report pesticide illness and noncompliance with the WPS to the local regulatory agency. The event was organized in partnership with the California Department of Public Health Office of Binational Border Health and the National Latino Research Center at California State University San Marcos.

**Making a Visible Difference in Communities - Worker Protection and IPM in Imperial County:** The EPA Region 9 Pesticides Office held two outreach events in Imperial County on May 4, 2016. The first was for the Farmworker Services Coalition of Imperial County on the revised Worker Protection Standard (WPS). Hosted by the California Employment Development Department in El Centro, the event included representatives from various state and local agencies, as well as the regulated community. An inspector from the Imperial County Agricultural Commissioner's Office was also in attendance to answer questions about local pesticide use enforcement. The second event was held at Brawley High School, where approximately 60 students learned about EPA, Integrated Pest Management, and some of the key changes in the WPS that directly impact their community.



**Worker Protection outreach in Yuma, AZ:** At an event hosted by the Mexican Consulate on May 2, the Pesticides Office presented information on the revised Worker Protection Standard (WPS) to representatives from various community organizations, agencies, and the regulated community. An inspector from the Arizona Department of Agriculture

was in attendance to address specific local enforcement questions.

### **Making a Visible Difference in Imperial County – Reducing Exposure to Pesticides**

Approximately 25,000 lbs. of pesticides and their containers were collected from over 30 growers in the Imperial Valley on May 26, 2016. EPA supported the effort with \$150,000 awarded to the California Department of Pesticide Regulation (DPR) through its continuing Pesticide Cooperative Agreement. The Imperial County Agricultural Commissioner's Office conducted the event, preventing exposure to unwanted pesticides and pesticide containers in this community.

### ***Air Quality and Asthma Education***

EPA and BHC committed to working with BHC to build environmental health capacity on asthma triggers, air quality, and asthma education and awareness. Examples of such projects are described below.

### **EPA Contributes to Success of 6<sup>th</sup> Annual Imperial Valley Environmental Health Leadership Summit**



Approximately 300 community members and representatives from federal, state, local, and tribal agencies participated in the 6<sup>th</sup> Annual Imperial Valley Environmental Health Leadership Summit. Matthew Tejada, Director of the EPA Office of Environmental Justice, represented EPA in a panel discussion on how government agencies can make a visible difference in communities

through environmental justice. Mr. Tejada spoke of the importance of partnerships across levels of government and organizations to help cultivate healthy and sustainable neighborhood solutions. The panel also included leaders from the California Department of Toxic Substances Control (DTSC), Physicians for Social Responsibility, and CalEPA. The Summit took place at Brawley Union High School in Imperial Valley, an EPA “[Making a Visible Difference](#)” community. Summit topics also covered asthma, climate change, the Salton Sea, pesticides, and citizen science. Francisco Domez of EPA Region 9 co-led a workshop on diesel pollution health impacts and emissions reduction programs. Between sessions, Mr. Domez also staffed an outreach booth to share related information and materials to summit participants. EPA also contributed contractor support for multimedia, workshop supplies, summary and evaluation, and implementation logistics. Priyanka Pathak of the EPA Region 9 Air Division and Jeremy Bauer of the EPA San Diego Border Office participated in planning calls and served as moderators during the summit.

**Imperial Valley Child Asthma Program (IVCAP)**



The Healthy Breathing Healthy Homes Project aims to improve childhood asthma outcomes by providing home assessments and education to 106 low-income families in eight target communities about managing indoor asthma triggers. This project also provided Healthy Homes training for 30 community health workers and promotores. In addition, 158 participants attended a Stop and Listen Asthma Forum on November 19, 2016. As part of this program, 19 asthma 101 information sessions at

childcare centers and outreach at 17 health fairs and community events were held. EPA, IVCAP, El Centro Regional Medical Center (ECRMC), and Border Environment Cooperation Commission (BECC) supported the \$55,000 program and the project were completed in February 2016.

**Environmental Health and Asthma Awareness in Low-income Housing Communities of Imperial County**

The Imperial Valley Child Asthma Program (IVCAP), under a \$98,518 EPA-funded Border 2020 grant, is convening community environmental health and asthma awareness fora to build asthma management capacity in low income communities in Imperial County. To date, IVCAP has convened four fora through which they have enrolled 21 families into one-on-one asthma intervention sessions and provided 13 referrals to asthma specialists. Under the same grant, IVCAP has also begun planning workshops to train maintenance workers to recognize and address asthma triggers in low income housing. IVCAP is working directly with the Brawley Housing Authority District and Calexico Housing Authority to organize the training workshops and reach the appropriate staff and maintenance workers. All activities are expected to be completed by March 2017.

**Environmental Health Promotor Workshops**

EPA staff planned a series of outreach and education efforts for 2015 and 2016 on environmental health along the U.S.-Mexico Border in collaboration with the BHC, the Border Environment Cooperation Commission (BECC), and the California Department of Public Health (CDPH), with support from the PEHSU. These efforts included a series of one-day workshops designed for “promotores” or community health workers. Topics included

indoor/outdoor air quality and asthma triggers, pesticides exposure, lead exposure, water quality, and climate change. During these interactive workshops, participants learned about the connection between environmental exposures and health and how to identify and address environmental health risks commonly found in communities near the U.S.-Mexico Border. The workshops also included group activities to facilitate exchange of information and ideas among attendees and to encourage professional networking. Attendance exceeded expectations and attendees included *promotores* from both the U.S. and Mexico. Simultaneous interpretation was provided. The training was well-received, and participants requested that EPA follow up with additional training and information, potentially through a regular newsletter. Training materials are available on the [Border 2020 website](#).

Dates of the workshops: August 24, 2016 in Harlingen, Texas; September 1, 2015 in Chula Vista, California; September 2, 2015 in El Centro, California; September 11, 2015 in El Paso, Texas; September 15, 2015 in Nogales, Arizona; and September 29, 2015 in McAllen, Texas.

### **Launching a Healthy Homes Initiative in Harlingen**

Through funding from EPA Region 6's Lead Based Paint and support from the Children's Health and US-Mexico Border Programs, three border communities were able to receive Healthy Homes Training in 2016. The trainings, which were provided by a small grant to the University of Texas School of Health Science Center in Houston, took place in June (El Paso, Texas) and August (McAllen and Harlingen, Texas). Approximately 103 persons received the training in these communities. Unlike the El Paso and McAllen trainings which focused on the initial "Healthy Homes Training"

Curriculum, persons who attended the Harlingen training received training on "How to start a Healthy Homes Initiative in your Community". The training covered materials that empowers stakeholders who have already taken the initial Healthy Homes training with tools that they can use to launch a healthy homes program within their community.

### **Border Binational Health Month (BBHM)**

Border Binational Health Month (BBHM) will be held during the month of October. The U.S.-Mexico Border Health Month's goal is to promote sustainable partnerships that can address border health challenges. Anticipated outcomes include increased community and inter-agency networking relationships, information sharing and educational opportunities, and awareness of the BHC and other state and local initiatives.

### **Border Environmental Health Data Compilation**

One of the key priority actions identified during the development of the collaborative agreement was the development of a "State of the Border Environmental Health Report" to document status and trends.

### **Border 2020 Grantees Identify Trends, Opportunities for Improvement in Environmental Health Data in the California-Baja California and Arizona-Sonora Border Regions**

In 2014 and 2015, Border 2020 awarded grants to two organizations to compile and assess existing environmental health data in the California-Baja California and Arizona-Sonora border regions, respectively. Grant awardees were charged with compiling and analyzing existing border environmental health data, creating a comprehensive snapshot of border environmental health in the region, and making recommendations on how to obtain additional data and coordinate

with Mexico on data gaps. The Public Health Institute submitted their final report on California-Baja California on August 10, 2015. The report found that air pollution continues to be a pervasive hazard in the border region with myriad sources, such as traffic, industrial pollutants, unpaved roads, and a drying inland seabed.

Asthma emergency room visits, hospitalization rates, and childhood asthma prevalence are consistently higher in Imperial County compared to the rest of California. Rates of clinical asthma diagnosis have been increasing in Baja California, while rates in Mexico have held fairly steady.

Moreover, Imperial County has very high rates of heat-related illness, likely a result of the combination of high heat, limited infrastructure to deal with extreme heat, and population vulnerabilities.

The Sonora Environmental Research Institute, Inc. (SERI), is currently finalizing its report, awarded under a 2015 grant. Preliminary findings note an overall decrease in blood lead levels in children living in all four Arizona counties in the border region between 2005 and 2015. However, data were based on a low screening rate (around 20%) and the state has plans to increase the screening rate to 85%. The findings also noted that approximately 4 percent of children attending schools in the Arizona border region are served by a water supply with at least one Safe Drinking Water Act violation. Additional information is needed to assess those served by private wells (5 percent of the population).

Work continues to evaluate information on additional areas of concern including mercury, pesticides poisoning, air quality, asthma rates, and asthma hospitalizations in the border regions of Arizona and Sonora.

Reports included recommendations for improving future data collection to maximize data availability and utility including identifying and engaging diverse bi-national stakeholders, establishing data sharing agreements, and developing consistent data and measures.

Dr. Aminata Kilungo, lead investigator and Director of Research and Development for SERI, presented these and other preliminary findings in January 2016 at the EPA-sponsored U.S.-Mexico Border Symposium on Protecting Children's Environmental Health. The final report is anticipated by February 2017.

### **Children's Environmental Health Symposiums**

In January 2016, a children's environmental health symposium took place in San Diego, California. The intended audience for these sessions were health care providers, academics, community health workers, policy makers, social workers, and community leaders. Several other Children's Health Symposiums were held including Brownsville, Texas on August 25, 2016, Mexicali, Baja California on September 27, 2016 and Nogales, Sonora on October 14, 2016. These symposiums will have a focus on vector borne diseases, including the Zika Virus.

## U.S. EPA, Partners Convene Symposium to Discuss Children’s Environmental Health Risks in U.S.-Mexico Border Region and Identify Solutions

U.S. EPA, in collaboration with the Agency for Toxic Substances and Disease Registry, BECC, the U.S.-Mexico Border Health Commission, the California Department of Public Health, and other partners held a 1.5-day symposium: Protecting Children’s Environmental Health in the U.S.-Mexico Border Region, on January 27-28, 2016 in San Diego, California. The symposium featured six plenary presentations, six sets of



Symposium organizers Jackie (left) and Jeremy (right).



Attendees participating in one of six plenary sessions. 136 attended the symposium.

concurrent presentations, and a poster session. Topics included government and community based initiatives, fundamentals of federal grants, ongoing challenges in border communities, including air quality, water quality, climate change, and vector-borne diseases, industrial pollution, environmental asthma triggers, pesticides, lead, mercury, and toxic chemicals in personal care products.

The EPA invited symposium attendees to participate in a 3-hour facilitated roundtable discussion after the symposium’s closing session to identify actionable recommendations to help guide future collaborative work in the border region. The session generated 42 recommendations by

more than 40 symposium attendees. Symposium presentations, proceedings, and a summary of the roundtable discussion are available at the [Border 2020 website](#).

### Brownsville Symposium

Over 130 doctors, nurses, promotoras, and public health professionals attended a one-day event on August 25, 2016 in Brownsville, Texas in the second children’s health symposium sponsored by EPA Region 6. Thirty experts presented on issues such as asthma, lead and mercury exposure, climate change impacts on children’s health and a dozen other topics.

## **EPA, partners convene binational symposia exploring environmental and health aspects of vector-borne disease**



Jeff Scott, Director of Land Division, EPA Region 9, welcomes symposium participants and discusses his hopes for the event.

On September 27, 2016 the EPA Region 9 U.S.-Mexico Border program and the Autonomous University of Baja California convened a binational environmental health symposium in Mexicali, Baja California focused on vector-borne disease, including Zika virus, in collaboration with Border 2020 partners, CDC and their Mexican counterpart, CENAPRECE, among others.

On October 14, the EPA Border program convened a similar symposium in Nogales, Sonora at the Technical Institute of Nogales, organized in collaboration with El Colegio de la Frontera Norte (COLEF), and other Border 2020 partners, again including CDC and their Mexican counterpart, CENAPRECE, among others.

Speakers at the two symposia included over 30 experts from the U.S. and Mexico, and over 360 attended, including medical students, faculty, health practitioners, and government officials among them. Session topics included preventative measures to combat Zika, integrated pest management, and adaptation to the spread of vectors due to climate change. In his opening remarks, Jeff Scott, Director of the EPA Region 9 Land Division, asked participants to commit to addressing sources of vectors by keeping their homes and environment clean and free of trash and standing water. Mr. Scott also



Students sign pledge poster committing to keep their homes and environments clean and free of trash and standing water to prevent the spread of mosquitos.

asked participants to pass on their new knowledge in the weeks and months following the symposium to their colleagues, family, and community. In evaluations for the events, 98 percent of respondents indicated that they learned something new, and more than 95 percent said that they intend to share their new knowledge. The EPA Border Office will send a follow-up evaluation to attendees to confirm symposium outcomes and follow-through. The agendas and presentations are available online at the [Mexicali](#) and [Nogales](#) symposia websites.