Summary

Over the past two years, 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 have developed a strategy to collaboratively address environmental and public health challenges of mutual concern and priority in the border region. Work is underway to revise and renew the current agreement. This report highlights accomplishments that were achieved under the 2013-2014 agreement, including:

- Established a Pediatric Environmental Health Speciality Unit (PEHSU) along the border to assist with medical information and advice on environmental conditions that influence children’s health along the border.

- Conducted 14 promotor training courses over the past two years in over eight cities along the Border covering a range of topics including asthma, pesticides, lead, water, and climate change.

- Worked together to develop and include language regarding environmental health into Healthy Border 2020. The final report, published in June 2015, includes asthma as a priority health topic and outlines collaborations among BHC, EPA and counterpart agencies in Mexico.

- Collaborated on curriculum development, team projects, and environmental leadership for the annual Leaders Across Borders initiative which helps build binational capacity in the health and community sectors.

- Leveraged binational expertise through active support and promotion of EPA’s Task Forces through meeting participation and sharing meeting information with stakeholders.

- Compiled environmental health data for the California-Baja California border region in 2014-2015 and initiated a parallel effort to be conducted for the Arizona-Sonora border region.

Background

EPA and the BHC committed to working more closely to advance environmental health priorities in the U.S.-Mexico Border Environmental Program: Border 2020: Fundamental Strategies on 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. The current collaborative agreement was officially adopted by EPA and the U.S. Section of the BHC in August of 2014 and can be found on both the Border 2020 and BHC
websites. Key actions within the agreement include intra-agency collaboration during Border Binational Health Week (BBHW) each October, a State of the Border Environmental Health Report (to document status and trends), collaborative support for the drafting of a new Healthy Border 2020 Program within the Border Health Commission, and the development of a Pediatric Environmental Health Specialty Unit along the border.

Program Collaboration Opportunities

The collaborative agreement identified three program areas and six project priority areas as collaborative opportunities and a starting point for collaboration.

Program Areas of Collaboration

1. Leaders across Borders
2. Community-based Healthy Border Initiatives
3. Healthy Border 2020

Project Areas of Collaboration

1. Chemical and Pesticide Exposure Prevention
2. Air Quality and Asthma Education Awareness
3. Pediatric Environmental Health Resource Units
4. Leverage Binational Expertise and Resources
5. Identify Project Funding and Leveraging Opportunities
6. Data Sharing

Accomplishments

The summaries below provide details of accomplishments achieved under the collaborative agreement. The accomplishments are presented in the following general order: 1) Launching Healthy Border 2020, 2) Establishing Pediatric Environmental Health Specialty Units (PEHSU) along the border, 3) increasing environmental health capacity, and 4) building leadership.

Healthy Border 2020

One of the key actions identified in the Collaborative Agreement was the development of the BHC’s Healthy Border 2020 initiative and accompanying report to guide border health efforts through 2020. EPA committed to help draft environmental health language consistent with Border 2020’s commitment to leverage and collaborate with BHC on common goals and in alignment with EPA’s Border 2020 Fundamental Strategies on “Working to Improve Children’s Health” and “Promoting Environmental Health.” EPA participated in several Border Binational Technical Workgroup meetings and on the drafting committee to assist with the development of environmental health language for Healthy Border 2020. The final Healthy Border 2020 framework was launched on June 24, 2015.

Establishing a Pediatric Environmental Health Specialty Units (PEHSU) along the Border

The PEHSU is composed of public health experts in children’s environmental health charged with improving the health of children by enhancing educational and consultative services to clinicians, health professionals, and the community and by providing evidence-based information from a network of experts in environmental health. The EPA provides funding to the Agency for Toxic Substances and Disease Registry (ATSDR) under an inter-agency agreement, and ATSDR contracts with the American Academy of Pediatrics (AAP: PEHSU-East) and the American College of Medical Toxicology (ACMT: PEHSU-West) for further distribution to PEHSU units.

One of the goals under the collaborative agreement was to explore the possibility of establishing pediatric environmental health specialty units along the border to assist with medical information and advice on
environmental conditions that influence children’s health along the U.S.-Mexico Border.

This goal was achieved in February 2015 when the Southwest Center for Pediatric Environmental Health (SWCPEH) was established in El Paso, Texas. The center transferred from its former location at the University of Texas Health Science Center in Tyler, Texas. It operates under the Division of Medical Toxicology, Department of Emergency Medicine, Paul L. Foster School of Medicine and is located within the offices of its strategic partner, the West Texas Regional Poison Center. It is staffed by PEHSU core faculty, regional medical consultants, and consulting toxicologist.

**PEHSU Capacity Building**

EPA and BHC have collaborated on PEHSU-provided training courses for several years. As early as 2012, doctors from the EPA Region 9 PEHSU provided advice and pediatric information to Imperial Valley childcare providers, caregivers, nursing staff and promotores on pediatric environmental health priorities.

Another training was provided in Imperial Valley in 2013 when EPA hosted two very successful binational Pediatric Environmental Health workshops in El Centro, California on February 6th and 7th. The training reached approximately 130 childcare providers, community health workers, school nurses, Mexican officials, and high school students with information about how to reduce children's exposures to environmental contaminants in schools, childcare facilities, homes, and neighborhoods. The workshops were conducted by doctors funded by the PEHSU’s at the University of California, San Francisco and the University of California, Irvine, (funded by EPA and ATSDR), and doctors from the University of California, Berkeley's Center for Environmental Research and Children's Health, (funded by EPA and the National Institute of Environmental Health Sciences (NIEHS)). The training logistics were supported by the Border 2012 Program and EPA's Office of Children's Health Protection (Clean, Green, and Healthy Schools Initiative). Participants overwhelmingly evaluated the training quality as "excellent."

**Chemical and Pesticide Exposure Prevention**

EPA and BHC have partnered with border communities on multiple 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.

**Breaking Barriers Pesticide Inspector Training in San Diego, California.**

Approximately 35 inspectors from five counties and the California Department of Pesticide Regulation participated in the Breaking Barriers training by EPA in San Diego, California on July 16, 2014. The course was originally developed by EPA Region 4 (Atlanta) and was adapted by EPA Region 9 specifically for staff of the California County Agricultural Commissioners. The purpose of the training is to break communication barriers between pesticide inspectors and Latino farmworkers during pesticide inspections. In addition to Spanish language and information on Latino culture, this interactive course includes basic interviewing techniques.

**Promotora Outreach on Proposed Worker Protection Safety Rules**

In an effort to include the farmworker community in the regulatory process, EPA presented proposed changes to the Agricultural Worker Protection Standard to a group of promotores (community health workers) in San Luis, Arizona on August 1, 2014. The promotores are members of Campesinos Sin Fronteras (farmworkers without borders), a community-based organization. The presentation was given in Spanish and in a Train-the-Trainer format for the promotores to deliver the information to their communities. The workshop also included information on general pesticide safety focusing on the importance of reading labels, how to prevent pesticide exposure at home and in the workplace, and where to report pesticide incidents.

**Pesticide Safety Training for Promotores**

On October 28, 2014, EPA conducted a workshop on Pesticide Safety for 22 promotores (Community Health Workers) in Calexico, California during Border Binational Health Week. The interactive session highlighted the importance of preventing pesticide exposure at home and
in the workplace, with a focus on safety provisions for farmworkers and using an Integrated Pest Management approach to control pests in the home. Also participating for the benefit of the participants, were the agencies that regulate pesticides in California, including the Department of Pesticide Regulation and the Imperial County Agricultural Commissioner’s Office, as well as the California Department of Public Health’s (CDPH’s) Office of Binational Border Health, and the Mexican Consulate’s Ventanillas de Salud.

Pesticide Safety Training – Making a Visible Difference in Communities

On August 13, 2015, EPA conducted a workshop on Pesticide Safety for twenty-one promotores (Community Outreach/Health Workers) in Brawley, California. The interactive four-hour session highlighted the importance of preventing pesticide exposure at home and in the workplace, with a focus on the safety provisions for farmworkers under the Worker Protection Standard, and using an Integrated Pest Management approach to control pests in the home. The promotores were very engaged and benefited from the attendance of the three agencies that regulate pesticides in California. These included EPA, California Department of Pesticide Regulation, and two pesticide inspectors from the Imperial County Agricultural Commissioner’s Office. The training participants represented various local organizations and were provided with teaching materials to carry the pesticide safety message to their communities. This Train the Trainer workshop is part of a comprehensive outreach strategy in EPA for Spanish-speaking farmworkers, and a commitment under EPA’s “Making a Visible Difference in Communities Initiative.” The event was organized by the California Department of Public Health's Office of Binational Border Health with support from the California Agricultural Labor Relations Board, and it was hosted by Comite Civico del Valle Inc., a non-profit community-based organization in Imperial County, California.

Air Quality and Asthma Education Awareness

EPA and BHC committed to working with BHC to building capacity on environmental asthma trigger, air quality and asthma education and awareness. Two examples of such projects are described below.

Promoting Children’s Environmental Health: Imperial Valley Asthma Forum

Consistent with binational efforts to improve children’s environmental health along the border, and in concert with Children’s Health Month and Border Binational Health Week, EPA participated in the third annual Stop and Listen Asthma Forum in El Centro, California on October 30, 2013. EPA, in partnership with the Imperial Valley Child Asthma Program and the BHC convened the event to highlight the severe asthma issues that plague Imperial County and to identify solutions to mutually explore and address. EPA provided opening remarks and listened to presentations by local high school students focused on asthma and the health impacts of border air quality on the community. A panel of judges evaluated the presentations and awarded prizes, which were provided by the Imperial County Air Pollution Control District.

Imperial Valley Child Asthma Program (IVCAP)

The Healthy Breathing Healthy Homes Project is working with families and physicians to promote education on indoor air and asthma triggers in the home. The $55,000 program is supported by EPA, IVCAP, El Centro Regional Medical Center (ECRMC), and Border Environment Cooperation Commission (BECC). As of August 2015, approximately half of the targeted 80 low income families living in underserved communities of Imperial County have been reached. The project runs through approximately February 2016.
EPA Supports Asthma Awareness Efforts in Imperial County.

EPA staff participated in the annual Stop and Listen Asthma Forum on November 13th, 2014 to raise awareness and education about asthma and potential disparities in the Imperial Valley. Local high schools competed for the prestigious annual award by showcasing presentations on asthma public service announcements to a panel of judges composed of representatives from the City of Brawley, Imperial County, NGO executive directors, Assembly member Perez and Senator Juan Vargas’ offices, local doctors and school and hospital administrators. The panel of judges scored and selected the winners, which are funded by the Imperial County Air Pollution Control District. EPA delivered remarks at the event and encouraged participants to actively participate in border task force meetings to provide input on air quality issues in the Imperial County/Mexicali region. The event was organized by the Imperial Valley Child Asthma Program (IVCAP) and sponsored by various local, state and community organizations.

Environmental Health Promotor Workshops

EPA staff have been planning a series of outreach and education efforts to occur in 2015 on environmental health along the U.S.-Mexico Border in collaboration with BHC and CDPH with support from the PEHSU. These efforts include a series of one-day workshops designed for “promotores” or community health workers. During these interactive workshops, participants will learn 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. Specific topics to be covered include:

- Air quality and asthma
- Water Quality
- Pesticides
- Lead
- Climate Change

Dates: August 26-27 in Laredo, Texas; September 1 in Chula Vista, California; September 2 in El Centro, California; September 11 in El Paso, Texas; September 15 in Nogales, Arizona; and September 29 in McAllen, Texas.

Border Binational Health Week (BBHW)

Border Binational Health Week (BBHW) occurs annually each October to promote sustainable partnerships that can address border health challenges. EPA regional offices have engaged with BHC on a variety of activities related to BBHW. The activities, which are described throughout this report, have included working with local NGOs on efforts to reduce agricultural “take home” exposure and to increase personal safety; showcasing integrated pest management programs; and teaming with local partners to train community health workers or promotores.

On October 16th, 2014, EPA participated in a children’s health presentation and discussion in San Diego at the binational Border Health Collaborative of the Californias. Participants included binational public health workers, government officials, and stakeholders from San Diego and Imperial Counties, as well as, representatives from Baja California. EPA gave an overview of efforts on children’s environmental health, including a binational perspective with examples of environmental health accomplishments along the border. The U.S.-Mexico Border Health Commission (BHC) discussed the recently released Collaborative Agreement between EPA under the US-Mexico Border 2020 Program and U.S. Human Health Services (BHC) and current efforts underway to meet those commitments. This activity helps fulfill binational commitments under the Border 2020 program and the Collaboration Agreement with BHC.
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.

EPA has made progress on the compilation of environmental health data. A Border 2020 Grant was awarded in December 2014 to the Public Health Institute to compile and analyze existing border environmental health data, to create a comprehensive snapshot of border environmental health in the California Border Region and to make recommendations on how to obtain additional data and coordinate with Mexico on data gaps. A final report was submitted on August 10, 2015. Some of the findings in the report included:

- Air pollution continues to be a pervasive hazard in the border region with myriad sources, such as traffic, industrial pollutants, unpaved roads, and drying seabeds.
- 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.
- 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.

In August 2015, the Sonora Environmental Research Institute, Inc. was awarded a Border 2020 Grant to complete a similar report for the Arizona-Sonora border.

Leaders across Borders

EPA and BHC collaborated on the annual Leaders across Borders initiative to help build binational capacity in the health and community sectors. Leaders across Borders seeks to provide participants with advanced leadership development through self-evaluation, new leadership skills, and enhanced cultural competency. Participants engage in meaningful team projects and strengthen and sustain their binational professional networks. EPA contributions have included curriculum development, team projects, and environmental leadership. Candidates are selected to participate in the learning program. 2015 marks the program’s fifth iteration, and binational health professionals have been selected to participate.

Task Forces and COBINAS

EPA and BHC committed to identify opportunities to share information and identify and address regional concerns and priorities, taking into account input from the Border 2020 task forces, local stakeholders, and the binational health councils (COBINAS). EPA and BHC leveraged binational expertise through active support and promotion of EPA’s Task Forces through meeting participation and sharing meeting information with stakeholders, including COBINAS. BHC members from New Mexico attended and presented at the Education Task Force and Environmental health Task Force meeting in spring 2015 in El Paso, Texas.

Children’s Environmental Health Symposiums

Collaborative planning has begun for two children’s environmental health symposiums to be convened in late 2015 and early 2016. Sessions are being planned for health care providers, academics, community health workers, policy makers, social workers, and community leaders. The first symposium will take place in El Paso, Texas on September 24-25, 2015 and the second is planned for January 2016 in San Diego, California.