

Implementation of Addressing Air Pollution in Agricultural Communities

Particulate Matter Problem
 Particulate matter, ozone, pesticides, and ammonia, a common product of animal farming, can worsen asthma. Air pollution is elevated in rural agricultural communities; linked to poor respiratory health in children.

Identifying Solutions
 Portable HEPA cleaners can reduce indoor triggers of asthma.

Improving Health
 Combining HEPA cleaners with in-home asthma education programs can reduce asthma symptoms and improve asthma control in children.

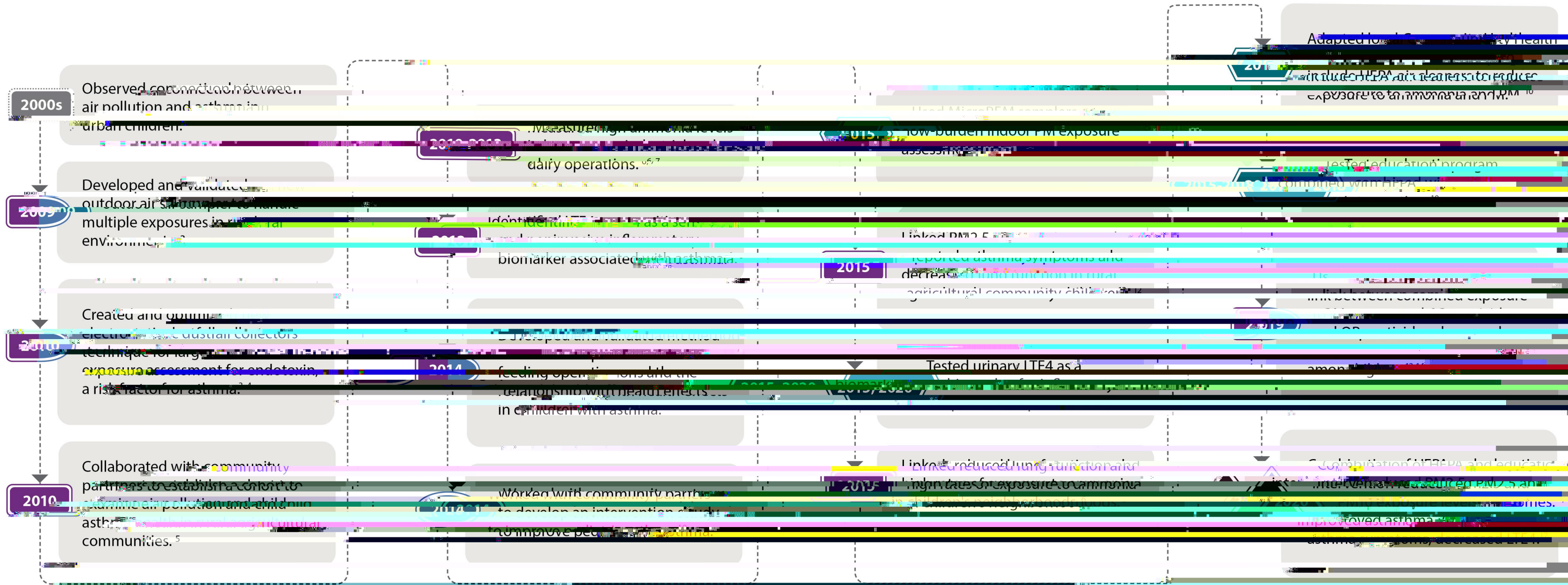


Sharing Results
 Disseminated findings through community events, health fairs, infographics, radio reports, a radionovela, and meetings with agency leaders.



Building Community Capacity
 Built capacity in partner organizations to conduct health assessments, collect samples, and work with air quality monitoring equipment.

Addressing Childhood Asthma in Rural Agricultural Communities



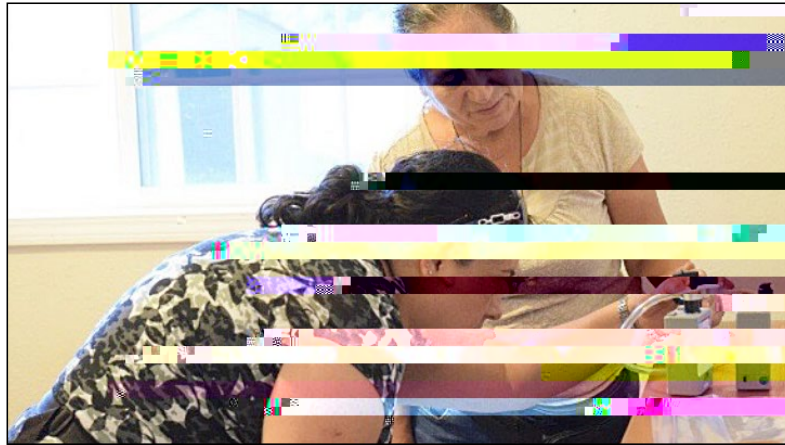
Challenge and Lesson Learned

Challenge: Researchers had to address families' logistical concerns about participating in the study.

Lesson Learned: Researchers purposefully found a sensor that met the needs of family members. The MicroPEM technology was developed by other NIEHS researchers and is small, quiet, and unobtrusive.¹¹

Challenge: The families who would most benefit from this intervention — immigrant Latino children with asthma living in rural agricultural Washington — can be reluctant to participate in medical research.

Lesson Learned: The research team built and sustained a long-standing partnership with the Northwest Communities' Education Center, Radio KDNA, the Yakima Valley Farmworkers Clinic, and Heritage University. The families were more willing to participate in the study because of the trust and goodwill established over time.



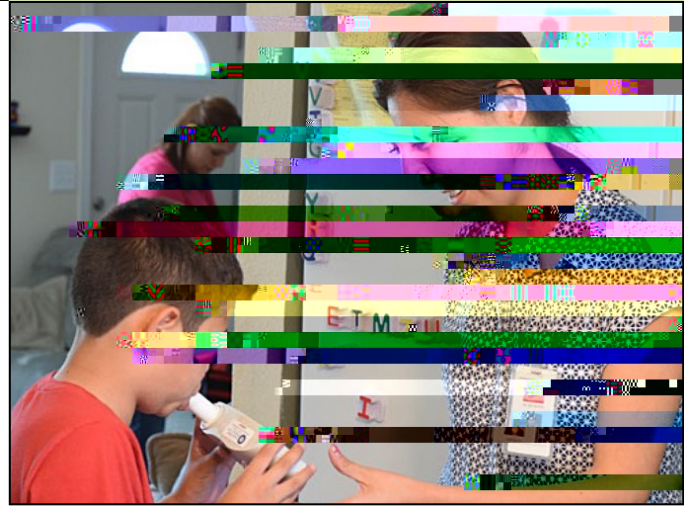
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Engaging With Communities

The research team trained and fostered job skills within local partner organizations, building their capacity to conduct community-based research and enabling them to tackle other challenges within their community.



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