



June 29, 2017

Kettleman City Community Health Canvass

Final Report



The Public Health Institute
SACRAMENTO, CALIFORNIA

Written for

Kings County Department of Public Health



Public Health
Prevent. Promote. Protect.

Kings County Health Department



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Departamento de Salud del Condado de Kings

by

Public Health Institute

Survey Research Group | Cancer Registry of Greater California

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Executive Summary

Kettleman City residents have expressed concerns regarding rates of birth defects and cancer in their community. Epidemiologic and research reports have concluded that the rates of birth defects and cancer in this community do not differ significantly from comparison groups. However, the community has continued to experience distress and anxiety regarding the incidence of these health-related outcomes. Governmental groups have expressed interest in prioritizing collaboration with this community to address and assuage their concerns.

Based on the recommendations of the Kings County Local Assessment Committee (LAC), Chemical Waste Management, Inc. (CWMI) provided funds for a community health survey of Kettleman City residents. The Kings County Department of Public Health posted a Request for Applications (RFA), and the Public Health Institute (PHI) was selected as the agency to conduct this survey after a competitive bidding process.

The primary deliverables of the Kettleman City Community Canvass were to:

1. Conduct a literature review and environmental scan regarding cancer and birth defects in Kettleman City
2. Review past and current data for Kettleman City cancer incidence and birth defects.
3. Conduct key informant interviews
4. Hold two community forums
5. Conduct a canvass (census) of the city and interview adults aged 18 and over.
6. Develop a final report for Kings County
7. Develop bi-lingual materials to share results with community members.

Literature Review and Cancer Data Analyses

The California Birth Defects Monitoring Program (CBDMP) is a population based registry that collects information on birth defects, stillbirths, and miscarriages in California. CBDMP found no direct

risk factors were found to influence the increased number of birth defects observed in Kettleman City between 2007 and March 31, 2010. In order to duplicate the analyses, PHI requested the data used in the analysis performed by CBDMP. As of May 31, 2017, PHI had not received this data.

The California Cancer Registry (CCR) is a population-based cancer registry that has been monitoring California cancer incidence and mortality since 1988. Overall, the cancer incidence patterns found in census tract 16.01, which encompasses Kettleman City, from 1996-2008 were similar to what would be expected when compared to the overall California population. The same result was found for childhood cancer incidence. CCR concluded that although cancer is being diagnosed in this area, there is no sign of excess cancer incidence or unusual patterns overall and in children. PHI's cancer epidemiologist and other researchers reviewed these analyses and agreed with the methodology, as well as the interpretation and presentation of results. Still, an updated analysis was performed by PHI. Using the same methodology as CCR, PHI conducted an analysis reviewing cancer cases from 1996-2014, adding an additional six years of cancer incidence data (2009-2014) to CCR's original dataset for census tract 16.01. These analyses did not result in different findings from the original analyses conducted by CCR. These data analyses are available upon request.

The California Environmental Protection Agency (CalEPA) is California's legal authority regarding air, water, soil, pesticides, and waste. CalEPA test results of the air, water, soil, and soil gas concluded it was unlikely that any exposure to the hazardous chemicals tested could be associated with birth defects. CalEPA did not conclude that Kettleman City's environmental conditions were unusual for its geographic region. In regards to potential agricultural exposures, the risk of birth defects from pesticides was reported to be low during September 2006-December 2009, and all of 2010. Air

monitoring upwind and downwind of the Chemical Waste Management Kettleman Hills Facility and the Kettleman City Elementary School showed normal concentrations of contaminants in the air. High levels of arsenic that exceeded California water standards were found in Kettleman City drinking water. The report stated it was unlikely this was a factor in children being born with birth defects, as most mothers interviewed said they did not use the tap water as a source for drinking water. Lead was detected in the well at the Kettleman City Elementary School, but the levels of lead were common in California and were deemed not to be a risk factor for the community. No evidence of illegal dumping of automobiles or trash, or petroleum sources posing a risk, were found. The soil and soil gas sampled at houses did have high levels of one contaminant (arsenic). The levels of arsenic found were consistent with levels found in California and other communities in the San Joaquin Valley. Lastly, in regards to the California Aqueduct, canals, and agricultural soils, arsenic and lead were detected in the aqueduct and canals, but the levels were below levels of health concern. No health concerns were found in the agricultural soil.

Key Informant Interviews

To inform the Kettleman City Community Canvass protocol, survey design, and outreach plan, PHI conducted Key Informant Interviews with a variety of stakeholders and organizations involved in the original Kettleman City investigation. Interviews were conducted in 2016. All interviews were conducted in English.

Community Forums

A community forum/meet-and-greet was held in April 2017 the day before data collection began for the Kettleman City Community Canvass. A second community forum was conducted in June 2017 to disseminate results to the community. Invitations were sent directly to participants. Forums were conducted in Spanish and English. In the weeks prior to both forums, a promotora, hired by PHI,

disseminated information about the survey and the forums to community members and local businesses via word of mouth, flyers, and social media.

Kettleman City Community Canvass and Survey Instrument

As a result of key informant interviews, a final list of community concerns to obtain further feedback from Kettleman City residents was developed.

- 1. Asthma**
- 2. Birth Defects**
- 3. Pesticides**
- 4. Learning Disabilities in Children**
- 5. Air Quality**
- 6. Health Care**
- 7. Job Opportunities**
- 8. Cancer**
- 9. Miscarriages**
- 10. Street Lights**
- 11. Stray or Loose Dogs**
- 12. Crime**
- 13. Streets (Curbs/ Gutters/ Sidewalks/ Stoplights/ Potholes)**
- 14. Water Quality**
- 15. Planned water treatment plant**
- 16. Changing Water Rates**
- 17. Immigration Issues**

PHI designed a study protocol which aimed to reach out to each individual address in Kettleman City to speak with at least one adult about their community priorities in Kettleman City. Six bilingual data collectors with extensive training in survey interviewing techniques were convened to canvass the entire city of Kettleman City going door to door.

Every household was approached up to two times over four days.

Results

The majority of respondents were Hispanic or Latino (99%), female (75%), and between 18-39 years old (39%). Almost three quarters (75%) did not have a high school diploma. The majority of the interviews (80%) were conducted in Spanish.

Participants were asked to select three issues from the provided list (n=17) that were most important to their household. The most commonly selected concerns included water quality, air quality, streetlights, streets (including curbs, gutters, lack of sidewalks, stoplights, and potholes), stray or loose dogs, and pesticides. For all of these top concerns, at least two-thirds of respondents indicated that they were highly concerned about the issue. The majority of participants who selected these issues also indicated that they felt the condition or risk was worsening or staying the same (as opposed to improving).

Participants most commonly reported being concerned about the health priority issues they named due to their impact on children's health and safety, their family's health and safety, and their neighbor's health and safety.

“Los perros - para mis hijos - que no pueden salir porque están los perros aquí de un lado. Para ir a la tienda, pues no, no pueden salir ni para la escuela porque se me regresan.”

The dogs – for my children – they cannot go out because the dogs are right here. To go to the store, well, no, they cannot go out, they can't even go to school because they come right back.

Participants expressed concern about the health impacts of air and water quality that they described as sub-standard.

“Siempre sale sucia, siempre esta amarilla,”

Always comes out dirty, it's always yellow

“El agua está muy fea, muy negra”

The water is very ugly, very black

“A veces viene bien sucia [el agua], bien café el agua, no se puede usar para bañarse.”

Sometimes, the water comes out very dirty, very brown, and you cannot use it to bathe.

Participants had anxiety about possible negative health consequences of the water in the future:

“El agua me preocupa también porque yo sé que no la consumimos, la que sale de la llave, pero nos lavamos las manos, nos bañamos, no sé si tenga algo malo en el futuro para uno.”

The water worries me also because I know we do not drink it, what comes out of the tap, but we wash our hands with it, we bathe with it. I don't know if the water might have something bad in it that will affect us in the future.

Participants were concerned about air quality.

“Huele muy feo, dolores de cabeza muy fuertes y pues para mí por eso es una de las más importantes.”

It smells very bad, I get strong headaches, and this is for me, one of the most important concerns.

Participants frequently mentioned feeling concerned because they felt people who do not live in Kettleman City, including government officials, do not understand the daily nature of life in the town.

“Kettleman city is a small town, small community, but just because we're small like this, and we live out on [sic] the middle of nowhere doesn't mean that we're not human beings. We need to have Kettleman City fixed up.”

“Como yo miro que en Hanford tienen las calles bien y las reparan sin tener necesidad y este pueblo que necesita que lo atiendan más lo ignoran.”

I see that in Hanford, they have nice streets and they repair them even when they don't really need repairs, and this town [Kettleman City] that needs help so badly, they just ignore it even more.

The most common reasons that participants liked living in Kettleman City were because it is calm and tranquil, and a small town. Some participants also said they liked living in Kettleman City because it

was affordable and provided opportunity for frequent work.

“Es tranquilo, se puede vivir bien.

It's tranquil, you can live well.

“It's peaceful, quiet...[I] know everybody.”

“Hay gente pacífica que no andan peleando.”

There are peaceful people that do not go around fighting.

Participants also mentioned they liked that Kettleman City was a small town.

“I like that everybody knows who lives in town. It's a small community. People know each other.”

Participants also mentioned they liked living in Kettleman City because the rent was affordable and there were jobs close by in the fields.

“Aquí pues todo el tiempo hay trabajo. Sobre todo en el fil, toda la gente, la mayoría trabajan en los files. Y es lo bien que yo veo que todo el tiempo hay trabajo.”

Around here there is always work. Especially in the fields, all the people, the majority of the people work in the fields. And this is what I see as good that all the time, there is work.

The most common reasons that participants found living in Kettleman City hard were because it is far from services and lacks access to food markets, health centers, and pharmacies. Other reasons that participants mentioned made it hard to live in Kettleman City were the water quality, crime, and lack of activities for young people to do.

“The hardest part is the distance to everything. Hospitals, groceries, everything...you name it...we are so far away.”

“Este no más está la clínica de lunes a jueves; viernes. Sábado y domingo no hay doctor y es cuando tenemos que ir a Hanford.”

The clinic [in Kettleman City] is only open from Monday to Friday. Saturday and Sunday, there is no doctor and that is when we have to go to Hanford.

Many participants expressed that Kettleman City needed a voice and money. Participants felt that they did not have a voice, and that their community's needs were not heard by government officials. Participants felt that if Kettleman City had civil representation, such as a mayor, it would improve the issues of concern that had been identified in the Canvass. Although a current representative exists (the Kings County District 2 Supervisor), some participants felt that Kettleman City had no civil representation.

“For a country that promotes free liberties and political movement to not have representatives in the town of 1,500 people [Kettleman City], you're limiting our liberties, our political engagement.”

Participants felt that Kettleman City did not receive enough money for infrastructure projects.

“Again we need money! And I don't even know if we have a budget or if they're allocating funds this way, so unless we have an actual budget and somebody who can oversee these [infrastructure] projects, we're getting nowhere.”

“If we had a clear voice could communicate to Kings County that we need funds, that we have no lights. They probably don't know that we don't have lights because they don't have a voice over here. So it all goes down to we need a voice.”

List of Abbreviations

<u>Abbreviation</u>	<u>Definition</u>
ARB	Air Resources Board
BRFSS	Behavioral Risk Factor Surveillance Survey
CalEPA	California Environmental Protection Agency
CBDMP	California Birth Defects Monitoring Program
CCR	California Cancer Registry
CDPH	California Department of Public Health
CEHAT	Community Environmental Health Assessment Team
CHIS	California Health Interview Survey
CRGC	Cancer Registry of Greater California
CSD	Kettleman City Community Services District
CWMI	Chemical Waste Management, Inc.
DPR	Department of Pesticide Regulation
DTSC	Department of Toxic Substances Control
EHIB	Environmental Health Investigations Branch
EPA	Environmental Protection Agency
IRB	Institutional Review Board
KHF	Chemical Waste Management Kettleman Hills Facility
LAC	Kings County Local Assessment Committee
OEHHA	Office of Environmental Health Hazard Assessment
PCB	Polychlorinated Biphenyls
PHI	Public Health Institute
RFA	Request for Applications
SEER	Surveillance, Epidemiology and End Results
SIR	Standardized Incidence Ratio
SRG	Survey Research Group

Acknowledgements

The Public Health Institute would like to thank the residents of Kettleman City for their participation in this project. Your willingness to share personal stories, assist our data collection team in identifying community priorities, and greeting our data collectors and organization with openness, respect, and kindness, went above and beyond. Thank you for your valuable contributions and your hospitality.

We would also like to thank the community members, residents, and public health employees who participated in key informant interviews. Your feedback had a tremendous impact in shaping the survey instrument and our research methodology in a culturally competent, scientifically valid, and respectful manner.

Finally, we would like to thank the Kettleman City Fire Station #9 and the Kettleman City Branch Library for allowing us to conduct our Community Forums at their facilities.

Funding and Conflicts of Interest

A condition of approval for Conditional Use Permit (CUP) # 05-10 regarding the development of the Chemical Waste Management, Inc. (CWMI) Kettleman Hills Facility circumstances of approval included a requirement that CWMI fund up to \$100,000 for a Kettleman City community health survey. In January 2016, the Kings County Health Department released a Request for Proposals (RFP) for this project. Following a competitive bidding process and interdepartmental evaluation committee review, the Public Health Institute was selected as the contractor and the subsequent project was approved by the Kings County Board of Directors on May 24, 2016.

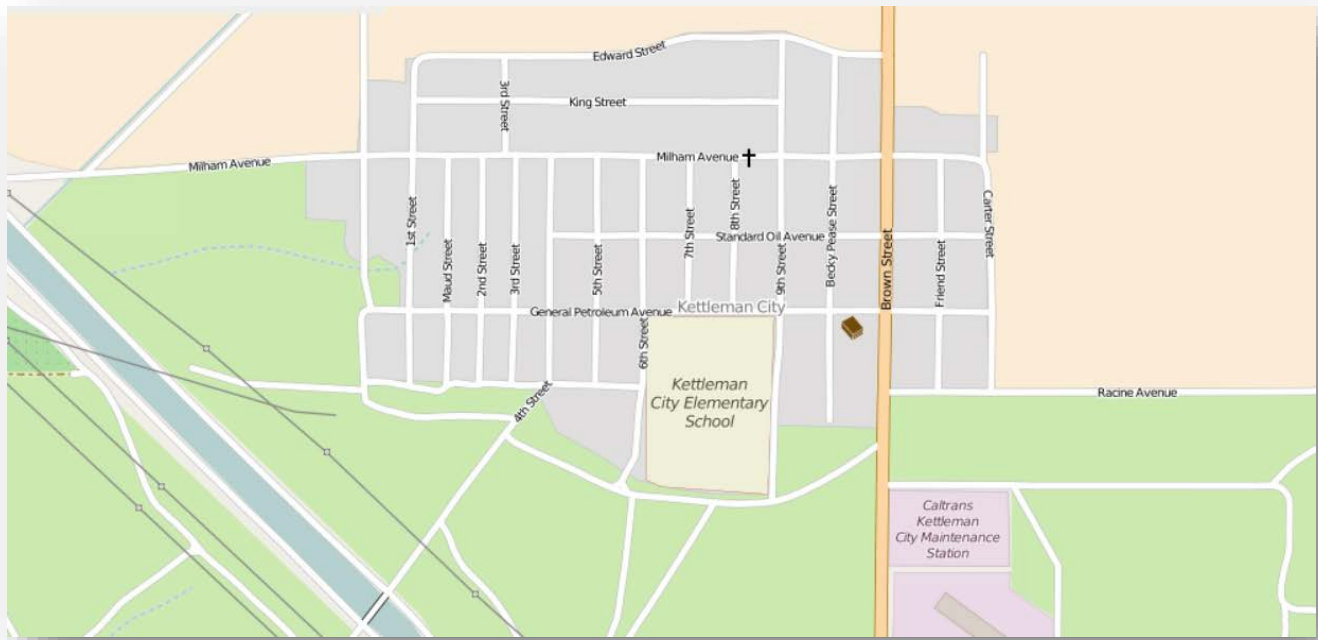
The Public Health Institute has had no communication with CWMI and they have not influenced the Kettleman City Community Canvass project, survey content, or data collection methods in any way.

This project is funded by the Kings County Department of Public Health, Agreement # 16-042. The Public Health Institute has no financial conflicts or disclosures to report, no conflicts with other project or independent contracts, and did not acquire any interest, direct or indirect, which conflicted with the rendering of services under Kings County Agreement # 16-042.

Background

Kettleman City

Kettleman City is a small town in Kings County, California, about 50 miles south of Fresno. This town, located in California's central valley, is less than a quarter square mile in size. According to the 2010 Census, 1,439 people live in Kettleman City, and 886 of these people are adults 18 years of age and older. Ninety-six percent of the city's population is Hispanic/Latino.



Kettleman City residents have expressed concerns regarding rates of birth defects and cancer in their community. Epidemiologic and research reports have concluded that the rates of birth defects and cancer in this community do not differ significantly from comparison groups. However, the community has continued to experience distress and anxiety regarding the incidence of these health-related outcomes. Governmental groups have expressed interest in prioritizing collaboration with this community to address and assuage their concerns.

Certain organizations, such as Greenaction, have generated additional concern in the community regarding environmental racism and contamination of Kettleman City's environment due to surrounding industries.¹ The Center for Race and Poverty has also had an influential environmental justice and advocacy presence in Kettleman City. Community members are scared that the cancer and birth defects they are experiencing and see their neighbors experiencing is caused by the pollution from neighboring industries. A brief summary of the report the CalEPA developed about the risk from possible environmental contaminants in Kettleman City is included in this document. Many residents have expressed apathy and distrust with previous reports. For example, there is concern that infants born in hospitals in Fresno to mothers living in Kettleman City may not have been accurately represented in previous reports.

¹ http://greenaction.org/?page_id=183

Impetus for the Community Health Canvass and Survey

Based on the recommendations of the Kings County LAC, CWMI was required to provide funds for a community health survey of Kettleman City residents to address community concerns regarding the incidence of birth defects and cancer. The Kings County Department of Public Health posted a RFA, and the PHI was selected as the agency to conduct this survey after a competitive bidding process.

PHI has had no communication with ChemWaste and they have not influenced this survey or our methods in any way. This project is separate from the Environmental Protection Agency (EPA) settlement announced September of 2016.

Summary of Proposed Approach to the Community Health Canvass

In response to this RFA, PHI proposed using our scientific knowledge, expertise in community engagement, and experience analyzing large cancer and health morbidity and mortality datasets (including the Surveillance, Epidemiology and End Results (SEER) cancer dataset) to generate sound science on this issue and function as an honest broker between the community and government entities. Furthermore, we proposed to work with community members to promote the project and improve rapport with the community, explore health behaviors and outcomes, and collect concerns and suggestions from community members. Our proposed methods for the community canvass included a complete census of households, so every household would have an opportunity to express their concerns to our bilingual and bicultural data collectors. Our approach was informed by community-based participatory research theory to make sure the community voice is heard and the community understands the strengths and limitation of our proposed research methods. This final report includes our scientific review of the evidence. Additionally, upon completion of the canvass, materials designed for the community, written in English and Spanish and in a way that is accessible to those with limited public health science expertise, will be made available on our website, as well as mailed out to participants who participated in the project. We believe our approach will be a catalyst for providing the Kings County Public Health Department with unbiased scientific evidence of the incidence of cancer, birth defects, and community concerns about these health issues in Kettleman city, which can help Kings County provide public health programs and education in this community. Furthermore, we expect that the community-based participatory research approach we used will improve rapport with the community.

Survey Research Group (SRG), in collaboration with the Cancer Registry of Greater California (CRGC) and Cultiva La Salud (all programs of PHI) planned to:

1. Conduct a **literature review and environmental scan** regarding the incidence of, and media coverage surrounding, cancer and birth defects in Kettleman City.
2. **Review** past and current **data for Kettleman City cancer incidence and birth defects** utilizing data from CCR, CRGC, SEER, and the CBDMP.
3. **Conduct key informant interviews** with CCR and CBDMP **staff** and current/former cancer registry Epidemiologists.
4. **Conduct key informant interviews with community leaders and stakeholders** to collect feedback and insight regarding the Kettleman City cancer concerns and birth defects and provide feedback on the survey instrument.
5. Hold two **Community Forums** to promote the project and share results with the community.

6. **Hire a Promotora** with previous outreach experience in Kettleman City to assist with input, promotion, and dissemination of results.
7. **Design and translate a survey instrument** with input from key informants and stakeholders. Use validated questions from other surveys and questions tailored to Kettleman City concerns, and test for cultural competency and regional relevancy.
8. **Partner with the Kettleman City local venues** to host forums and promote the data collection effort.
9. **Collaborate with Cultiva La Salud** and connect with influential community residents, local government agencies, community programs, nonprofits, faith-based programs, farmers and flea markets, and retail outlets to promote the data collection effort. Provide materials for partners.
10. **Conduct a census (canvass)** of Kettleman City adult residents and collect 268 surveys with adults aged 18 and over.
11. **Develop a final report** that encompasses findings from the literature review, key informant interviews, survey results, and community engagement processes, and feedback from Kings County and community members.
12. **Develop English and Spanish written and electronic materials** (such as an infographic or brochure) to share results with community members.

Public Health Institute, Survey Research Group, Cancer Registry of Greater California

Founded in 1964, the PHI is an independent 501(c)3 nonprofit organization that advances the public's health by providing the leadership and technical and administrative capacity to effectively respond to public health problems.

SRG, a program of PHI, is a bilingual organization in both operational and research areas. The lead research staff on this project (Dr. Induni and Ms. Ryan-Ibarra) are both bilingual. Staff that leads instrument translation has advanced training in translation and cultural appropriateness. All of our data collectors are bicultural and bilingual. Collectively, these staff have conducted over 50,000 surveys in English and in Spanish, and have expertise in data collection activities. These staff specialize in conducting surveys regarding sensitive topics, addressing questions and concerns regarding surveys for potential participants, refusal conversion techniques, and providing culturally competent and tailored customer service. Given SRG's largely bicultural and bilingual staff, Latino community members who interacted with our team during study activities encountered Spanish speakers who share similar linguistic and cultural backgrounds.

SRG has extensive experience designing and implementing multi-lingual instruments for quantitative and qualitative public health research. Moreover, SRG has extensive experience conducting research with diverse populations in California. For the past three decades, SRG has translated survey instruments for in-person, telephone, web-based, and mobile-smartphone surveys. SRG staff has also reviewed Spanish surveys provided by previous clients (such as the Centers for Disease Control and Prevention, the California Department of Public Health (CDPH), and the California Emerging Infections Program) for cultural appropriateness. For example, some of the translations conducted for national surveys must be adapted for use in California due to linguistic differences between Latin American regions and countries (i.e., Mexico versus the Dominican Republic).

For the past five years, PHI has assisted CDPH, Cancer Surveillance and Research Branch with the administration of the California Cancer Registry for California Regions 2, 3, 4, 5, 6, and 7/10. These regions

comprise the CRGC, a program of PHI, and geographically cover the entire state except for Los Angeles, San Francisco Bay Area and Central Coast regions. Registry operations include collecting, processing, and compiling cancer data. In collaboration with CDPH, PHI also uses the data to support regional cancer surveillance and cancer control activities.

PHI also receives funding from the National Cancer Institute to run a SEER program. This data is eventually consolidated at the National Cancer Institute with data from other SEER registries across the United States, allowing researchers to find patterns of treatment and identify any disparities by age, geography, or race and ethnicity. This information is then used to inform providers of cancer care and for further research into reasons for disparities.

Media and Literature Review

Selected Media Coverage: Kettleman City Investigation					
Title	Source	Date	URL	Theme	Quotes
Birth Defects in Kettleman City and Surrounding Areas 2009-2011 Update	CDPH, CBDMP, MCAH		https://archive.cdph.ca.gov/programs/CBDMP/Documents/MO-CBDMP-BirthDefectinKC-English-2009-11.pdf	Infant Deaths/ Birth Defects	<i>The current report includes completed data for births occurring in 2009 and preliminary data for births occurring in 2010 and 2011. In addition to Kettleman City, nearby and surrounding areas were included as references for comparison.</i>
Birth Defects in Kettleman City	CDPH, CBDMP, MCAH		https://archive.cdph.ca.gov/programs/CBDMP/Documents/MO-CBDMP-KettlemanCityReport.pdf	Birth Defects	<i>This study looks at birth defects in four areas: Kettleman City, Avenal (another city within close proximity to Kettleman City), Kings County, and the five southern Central Valley counties (Kings, Fresno, Kern, Madera, and Tulare).</i>
What's hurting babies in Kettleman City?	The Tribune	11/25/2009	http://www.sanluisobispo.com/news/local/article39111723.html	Infant Deaths/ Birth Defects	<i>But experts say parents may never know what hurt their babies. Apparent spikes in birth defects or cancer cases are notoriously difficult to verify, especially in small communities — and linking them to a specific cause is even harder</i>

Selected Media Coverage: Kettleman City Investigation

Title	Source	Date	URL	Theme	Quotes
Birth Defects Plague Tiny California Town	ABC News	2/8/2010	http://abcnews.go.com/Health/Wellness/birth-defects-plague-california-town-kettleman-city/story?id=9757487	Infant Birth Defects/Deaths, Miscarriages, Community	<p><i>"We're very confident that we're protective of human health and the environment, and that our site is very, very safe. But that doesn't negate the fact that these families deserve answers." -Kit Cole, Chemical Waste Management</i></p> <p><i>Some residents are angry... after local health officials told them that the number of babies born with defects wasn't high enough to sound the alarm. Some of the residents say they want to leave Kettleman City. Others are bound by family obligations and fear that their undocumented status will cause problems if they try to settle elsewhere.</i></p>
State Report Fails to Find Underlying Cause of Kettleman City Birth Defects; Activists Demand Further Action	Fresno Community Alliance	1/1/2011	https://fresnoalliance.com/state-report-fails-to-find-underlying-cause-of-kettleman-city-birth-defects-activists-demand-further-action/	Environmental Issues/Waste Facility	<i>Their conclusion was that no common factor could be found to explain why there were 11 babies born with a cleft palate and other developmental problems, including three who died, in this rural town of 1,500 souls during the three-year period from 2007 to 2010.</i>
Kettleman Hills Toxic Waste Landfill Permitted to Expand	Fresno Community Alliance	8/1/2013	https://fresnoalliance.com/kettleman-hills-toxic-waste-landfill-permitted-to-expand/	Environmental Issues/Waste Facility	<i>In a decision that's sure to be controversial, the California Department of Toxic Substances Control (DTSC) issued a draft permit to the Chemical Waste Management Company to expand its hazardous waste landfill near the Central Valley town of Kettleman City.</i>

Selected Media Coverage: Kettleman City Investigation

Title	Source	Date	URL	Theme	Quotes
Time Running out for Latino community standing up against waste facility	Mint Press News	10/11/2013	http://www.mintpressnews.com/time-running-out-for-latino-community-standing-up-against-waste-facility/170397/	Environmental Issues/Waste Facility	<i>“What we want to accomplish with this piece is expose the issue and get the Department of Toxic Substances Control to stop the expansion of Waste Management’s facility in Kettleman City, California.” - Luis Moreno</i>
Kettleman City Resident Uneasy With Landfill's Connection To Clean Water Plan	Rebecca Plevin, Valley Public Radio	12/10/2013	http://kvpr.org/post/kettleman-city-resident-uneasy-landfills-connection-clean-water-plan#stream/0	Environmental Issues/Waste Facility	<i>If the landfill is approved, its owner, Waste Management, has agreed to pay more than \$500,000 to cover the debt on the town’s current water system. That alone wouldn’t bring the residents of this poor, farmworker community clean water. But it would help them move forward with a plan to get more costly, treated water from the California Aqueduct.</i>
Kettleman City Weighs Toxic Dump Expansion Against Funding for Clean Water	The California Report	2/3/2014	http://audio.californiaireport.org/archive/R201402030850/b	Environmental Issues/Waste Facility	<i>“We know the water has to be fixed,” she says. “It’s an important thing for our residents – but I also see other communities have significant water issues like nitrates, and arsenic, and they’re getting solutions, and they’re not agreeing to the expansion of a giant toxic waste dump in their backyard.” - Maricela Mares-Alatorre</i>
Waste facility allowed to expand, despite community's health concerns	Louis Shagun, LA Times	5/21/2014	http://www.latimes.com/local/la-me-0522-kettleman-20140522-story.html	Environmental Issues/Waste Facility	<i>In 2005, the company was fined \$10,000 for violating federal PCB monitoring requirements. It was cited again in 2007 for failing to properly analyze incoming waste, storm water runoff and leachate for PCBs. In 2010, the EPA levied a \$302,100 fine against the facility for failing to properly manage PCBs. A year later, the facility agreed to pay \$400,000 in fines and spend \$600,000 on laboratory upgrades needed to properly manage hazardous materials.</i>

Selected Media Coverage: Kettleman City Investigation

Title	Source	Date	URL	Theme	Quotes
California Town's Water Tainted With Arsenic For Decades	CBS SF Area	5/19/2016	http://sanfrancisco.cbslocal.com/2016/05/19/california-towns-water-tainted-with-arsenic-for-decades/	Water	<i>"We found 50,000 people had been exposed to arsenic in their drinking water well above federal health standards for more than a decade. The federal drinking water limit for arsenic of 10-parts per billion was set for a reason. Anything over that is unsafe. If you are telling people its not a big deal, well then its no wonder these systems are taking so long to get fixed." - Eric Schaeffer, former Head of Enforcement, Untied States EPA</i>
Part II: California Town's Water Tainted With Arsenic For Decades	CBS SF Area	5/19/2016	http://sanfrancisco.cbslocal.com/2016/05/19/part-ii-california-towns-water-tainted-with-arsenic-for-decades/	Water	<i>There is a town in the Central Valley where the drinking water is so contaminated, residents haven't been able to drink it for decades.</i>
Board of Supervisors approves Kettleman City survey	Hanford Sentinel	5/31/2016	http://hanfordsentinel.com/news/local/board-of-supervisors-approves-kettleman-city-survey/article_a838cf54-c7b1-5068-a50b-517e7860e931.html	Environmental Issues/Waste Facility	<i>The survey was part of a 2009 agreement reached between Chem Waste, residents and a board-appointed assessment committee after Chem Waste submitted a request to expand its hazardous waste facility near Kettleman City.</i>

Selected Media Coverage: Kettleman City Investigation

Title	Source	Date	URL	Theme	Quotes
Kettleman City’s Contaminated Drinking Water Found At I-5 Fast Food Stops	CBS SF Area	8/1/2016	http://sanfrancisco.cbslocal.com/2016/08/01/kettleman-citys-contaminated-drinking-water-found-at-i-5-fast-food-stops/	Water	<i>The water is so bad residents are forced to drink bottled water, delivered twice a week. Still, at local restaurants the ice and the water used to mix sodas comes from the tap. Samples we took at Taco Bell, Carl’s Jr. and In-N-Out came back well above the EPA maximum contaminant level of 10 parts per billion.</i>
State, Kettleman City advocates settle dispute over toxic waste landfill	The Fresno Bee	8/10/2016	http://www.fresnobee.com/news/local/article94948467.html	Environmental Issues/Waste Facility	<i>Last year, Greenaction for Health and Environmental Justice and El Pueblo/People for Clean Air & Water of Kettleman City filed a federal administrative civil rights complaint saying that low-income, Latino residents in Kettleman City were discriminated against in the permitting process.</i>
Historic agreement a victory for environmental justice groups, Kettleman City residents	Vida en el Valle	8/16/2016	http://www.vidaenelvalle.com/news/state/california/fresno/article95843082.html	Environmental Issues/Waste Facility	<i>“This historic settlement will help protect the health, environment and civil rights of low-income, people of color and non-English speaking residents living in Kettleman City and dozens of other at-risk and polluted communities across the state.” -Bradley Cooper, GreenAction" This agreement helps the people of Kettleman City and aligns with our efforts to prioritize environmental justice in the decision-making processes of all the boards and departments within CalEPA." - Matthew Rodriguez, California’s Secretary for Environmental Protection.</i>

Selected Media Coverage: Kettleman City Investigation

Title	Source	Date	URL	Theme	Quotes
Kettleman City residents get answers to questions about construction of water treatment plant	ABC 30	8/31/2016	http://abc30.com/society/kettleman-city-residents-get-answers-to-questions-about-construction-of-water-treatment-plant/1493726/	Water	<i>Kettleman City Community Services District said if everything runs on time, it plans to break ground on the \$9-million plant by next spring. But until it's done, residents will have to continue drinking bottled water.</i>
Environmentalists, state settle differences over hazardous waste site	The Fresno Bee	9/5/2016	http://www.fresnobee.com/news/local/article100013267.html	Environmental Issues/Waste Facility	<i>"We are living next to a toxic waste dump. There's arsenic in the water. There are pesticides in the fields. We are in the top 10 percent of environmentally vulnerable communities in the state." - Maricela Mares-Alatorre</i>
Small community is one of many grappling with big water problems	Marketplace	2/22/2017	https://www.marketplace.org/2017/02/22/sustainability/small-community-one-many-grappling-big-water-problems	Water	<i>In 2008, government tests found excessive levels of arsenic in the drinking water. Five years later, the state began supplying every home with bottled water. The crisis in Flint struck a chord in Kettleman City.</i>

Selected Media Coverage: Kettleman City Investigation

Title	Source	Date	URL	Theme	Quotes
What's Killing the Babies of Kettleman City?	Mother Jones	7/1/2010	http://www.motherjones.com/environment/2010/07/kettleman-city-toxic-birth-defect-cluster	Infant Birth Defects/Deaths	<p><i>"When my child was born, I thought she was the only one with a deformity. But when it began happening to other babies, I realized there was something abnormal in my community." - Magdalena Romero</i></p> <p><i>The trouble is that science is not likely to back them up. To find a chemical culprit for the birth defects would require not just identifying substances in the air, water, or soil that are capable of causing such defects, but also tracing their pathway to townspeople's bodies.</i></p>
Small California town fears birth defects linked to toxic waste	CNN	3/23/2010	http://www.cnn.com/2010/US/03/22/toxic.injustice/	Birth Defects	<i>"We don't want an expansion because we feel like there are a lot of health problems in town and we're not necessarily attributing it to the dump, but we feel like with all of the other environmental factors we face, why add more to it?" - Maricela Mares-Alatorre</i>
State: No common cause for Kettleman City birth defect	The Sentinel	11/23/2010	http://hanfordsentinel.com/news/local/state-no-common-cause-for-kettleman-city-birth-defect/article_948787a0-f733-11df-95c8-001cc4c002e0.html	Birth Defects; State Investigation Results	<i>"Did they test diesel emissions? We don't know. Did they consider the fact that Chem Waste has been repeatedly busted for improper monitoring and handling of PCBs? Did they do a community health survey? Did they test the breast milk of the mothers? Did they do any biomonitoring of people's bodies?" -Bradley Angel, GreenAction</i>

Selected Media Coverage: Kettleman City Investigation					
Title	Source	Date	URL	Theme	Quotes
Toxic Waste dump ruled out as cause of Kettleman City birth defects	LA Times	11/23/2010	http://articles.latimes.com/2010/nov/23/local/la-me-kettleman-defects-20101123	Birth Defects	<p><i>"While we wish there was an explanation for what caused the birth defects experienced by the children we studied in Kettleman City, our investigation finds that no common health or environmental factor links the cases." - Mark Horton, Director, California Department of Public Health</i></p> <p><i>"We're very, very disappointed. The state left us with a monster on the loose in town, and we don't know when it will strike next." - Maricela Mares-Alatorre, People for Clean Air and Water</i></p>
Kettleman City Birth Defects Not Linked to Landfill, Study finds	New America Media: Latino	11/29/2010	http://newamericamedia.org/2010/11/kettleman-city-birth-defects-not-linked-to-landfill-study-finds.php	Birth Defects	<p><i>Kettleman City community members and their advocates have often cited Kettleman Hills, a controversial hazardous waste site located 3-1/2 miles from the residential area, as a potential source of the health problems. But the study found no evidence that the site had caused water or air contamination in the Kettleman City community.</i></p> <p><i>"I feel that they need to continue the investigation, and it needs to be more thorough. They need to find out actually why the birth defects happen, so people can continue to have babies without fear." - Maricela Mares-Alatorre</i></p>

Selected Media Coverage: Kettleman City Investigation					
Title	Source	Date	URL	Theme	Quotes
Public Meeting Notice	CDPH		https://archive.cdph.ca.gov/programs/CBDMP/Documents/MO-CBDMP-NoticeofPublicMeeting.pdf	Birth Defects	<i>CDPH will provide an update of birth defects in Kettleman City as well as cancer and will talk about the status of the new source of drinking water.</i>
The Kettleman Hills Facility: There's More Than You Know	Waste Management		http://kettlemanhillslandfill.wm.com/index.jsp	Environmental Issues/Waste Facility	<i>A premier world-class facility, Kettleman Hills is also the most thoroughly analyzed hazardous waste facility in the country. In 2010, in response to concerns about potential public health impacts in Kettleman City, CalEPA and the California Department of Public Health (CDPH) undertook an investigation unprecedented in scope to determine the possible sources of cancer, birth defects and other public health impacts in Kettleman City. The result: no linkage has been found between facility activities and any public health impacts in Kettleman City.</i>
Environmental Justice: Opposing a Toxic Waste Incinerator	PBS Learning Media		https://ca.pbslearningmedia.org/resource/envh10.sci.life.eco.enhdiscrim/environmental-justice-opposing-a-toxic-waste-incinerator/#.WSdVN4zyuUk	Environmental Issues/Waste Facility	<i>Learn about the rural town of Kettleman City, California, where one of the country's largest hazardous waste landfills is located.</i>

Large Investigation Report Summary and Current Cancer Incidence and Birth Defects in Kettleman City

In 2010, CalEPA and the CDPH were directed by Governor Arnold Schwarzenegger to investigate a suspected increase of birth defects and cancer incidence in Kettleman City, California. The CDPH, Environmental Health Investigations Branch (EHIB), the CBDMP, and the CCR worked together to conduct an extensive investigation on the apparent increased number of birth defects, cancer incidence, and environmental exposures that could be linked to birth defects and cancer incidence.

The formal report presenting the findings of such investigations titled, Investigations of Birth Defects and Community Exposures in Kettleman City, California, was released in November 2010. Within this report, CBDMP, CCR, and CalEPA presented their methodology, results, and conclusions regarding each investigation. A summary of these three reports, as well as any additional analyses PHI was able to conduct, are presented below.

Summary: Investigation of Birth Defects in Kettleman City

Background

The CBDMP is a population based registry that collects information on birth defects, stillbirths, and miscarriages in California.²

Prior to the investigation directed by Governor Schwarzenegger, CBDMP analyzed birth defects data from 2008 and found a higher elevation of birth defects than what would generally be expected in Kettleman City. This suspected elevation prompted a more in-depth investigation to look at medical history, risk factors, and exposures of families with children diagnosed with birth defects. The residents of Kettleman City expressed concerns with regards to exposure to pesticides, poor drinking water, hazardous wastes, and air pollution, and how these exposures increase their risk of adverse health conditions. The area surrounding Kettleman City is primarily used for agriculture and pesticides are used on the fields, which made residents concerned about the potential exposure due to aerial spray drift.

The drinking water in Kettleman City has not met standards for multiple years. There are two water sources: Kettleman City Community Services District (CSD) and the Kettleman City Elementary School water system. Prior testing of the water sources showed evidence of benzene, but no evidence was found in any of the water samples taken from the two water sources during the 2010 investigation. Although arsenic naturally occurs in soil and found in California water sources, CSD wells had high levels of arsenic the exceeded the California water standards, but Elementary school water met the California water standards. Located about 3.5 miles from Kettleman City, the Chemical Waste Management Kettleman Hills Facility (KHF) has been utilized as a waste disposal facility since 1975.

² <https://archive.cdph.ca.gov/programs/CBDMP/Pages/default.aspx>

Methods

The CBDMP did not investigate the environmental risk factors directly, but relied on the CalEPA investigation to examine any potential risk factors that could arise from such exposures. Thus the objectives of CBDMPs investigation were to evaluate any genetic, medical, or pregnancy-related risk factors, behavioral and lifestyle risk factors, and occupational exposures, which might be related to birth defects. Children born with a birth defect between 2007 and 2010 who resided in Kettleman City were included in this investigation. A comparison group of children born with a birth defect included children from all of Kings County, Fresno County, Madera County, Kern County, and Tulare County.

Questionnaires were developed to interview mothers about risk factors known to be associated with birth defects as well as other risk factors the community was concerned about. Maternal age, prior pregnancies (including abortions or stillbirths), exposure to x-rays and CT scans, medical conditions such as diabetes, thyroid disorders and high blood pressure, obesity, smoking status, and alcohol consumption were included. Although most of the environmental risk factors were assessed by CalEPA, CBDMP also asked mothers about pesticide use in the house, occupations of all household members, drinking water sources, and outdoor activities that could increase the risk of exposure to exhaust, chemicals, or poor air quality.

In total, 15 children born with birth defects were identified, and 11 met the eligibility criteria to be investigated further. Multiple attempts were made to contact mothers, and sometimes fathers, of children who were born with a birth defect and lived in Kettleman City at the time of birth. Of the 11 eligible parents, six agreed to participate in the interviews. Medical records were obtained when possible to supplement data gathered in the interviews.

Results

All 11 children born with birth defects during the study period had different underlying conditions. The 11 conditions shared similar features, but no apparent pattern existed with regards to the specific type of birth defect. An expedited review was done on all children born after March 31, 2010, which found that no new cases of birth defects were reported by the time the final report was published.

Of the 11 children born with birth defects, interviews were completed with six of their mothers. CBDMP concluded that the mothers did not report any medical conditions or take any medicines while pregnant that would have increased their risk of having a child born with a birth defect. Most of the mothers had experienced previous pregnancies and none of those children were born with a birth defect. While pregnant, none of the mothers reported encountering any stressful life events, using tobacco or illicit drugs, drinking alcohol, or consuming large amounts of caffeine.

In regards to environmental and pesticide exposures, some mothers were employed in agricultural occupations, but none directly handled pesticides. Most fathers or someone else in the household worked in agriculture, and reported wearing appropriate personal protective equipment during work. Pesticide use in the house was limited to controlling insects or weeds, and most of the applications were done outside the home. While the data collected on occupation, pesticide use and restriction adherence concluded that harmful exposure to pesticides was unlikely, it could not be 100% confirmed that the mothers were never exposed to pesticides.

All mothers interviewed expressed concern over the odor, taste, and appearance of the tap water supplied to them by the public water supply. For drinking and cooking purposes, bottled water was primarily utilized. The tap water was primarily used for bathing, and CBDMP reported such exposure would not increase the risk of

birth defects. Mothers consumed the recommended allowable amounts of fish, which were purchased from the store (as opposed to being caught recreationally).

Conclusions

No direct risk factors were found to influence the increased number of birth defects observed in Kettleman City between 2007 and March 31, 2010. Type of birth defects, family medical history, and occupation, history of environmental exposures and pesticide use, and water exposure were not associated with documented birth defects. CDPH and CBDMP confirmed that continued surveillance would occur to monitor any patterns or excess of birth defects.

In order to duplicate the analyses, PHI requested the data used in the analysis performed by CBDMP. As of May 31, 2017, PHI had not received this data.

Summary: Evaluation of the Pattern of Cancer Occurrence in the Vicinity of Kettleman City, California

Background

CCR is a population-based cancer registry that has been monitoring California cancer incidence and mortality since 1988. All cancer cases, data on demographic factors, diagnosis and treatment information, and tumor characteristics are routinely ascertained. Due to the concern of increased birth defects in Kettleman City, and the environmental concerns of the city's residents, CCR was asked to conduct an evaluation on cancer incidence in Kettleman City.

Methods

At the time CCR conducted their evaluation, the database containing all cancer incidence data was complete from 1988-2008. Currently, the database is complete through 2014. Researchers from CCR examined cancer occurrence at the census tract level. Census tract 16.01 is inclusive of Kettleman City and was used as the geographic boundary for the analyses. Both quantitative and qualitative approaches were used to evaluate cancer incidence in Kettleman City, as defined by census tract 16.01. Qualitatively, CCR compared cancer incidence in census tract 16.01 overall, and, by age and race, to other similar communities and census tracts in California.

Quantitatively, to evaluate excess in cancer incidence, the observed number of cases in census tract 16.01 was compared to the expected number of cases. The number of cancer cases observed must differ substantially from the expected pattern in number, type, or age of the cases and be statistically significant to be considered a cluster. A standardized incidence ratio (SIR) was calculated to statistically test if the difference between the observed and expected counts were statistically significant. An SIR determines if the number of observed cancer cases in an area is higher or lower than expected. The SIR takes into account the population of interest and allows comparison of two different populations, even if their age distributions differ. An SIR greater than one would indicate that there was an excess; statistical significance was determined with 99% confidence intervals.

In the evaluation conducted by CCR, cases diagnosed in 1996-2008 and the most common 30 cancer sites were examined in census tract 16.01 and compared to the population of California and nearby census tracts 12.00 and

17.01, respectively. Due to Kettleman City's large percentage of Hispanic/Latino residents, analyses were conducted for all race/ethnicity groups combined as well as for the subgroup of Hispanics/Latino only.

Results

During 1996-2008, there were 113 cases of cancer in census tract 16.01. Of these 113 cases, 28 were from Kettleman City. In census tract 16.01, 48% of cases were non-Hispanic White, 39% were Hispanic, and 13% were of other races/ethnicities. Individuals 55 years and older comprised of 71% of the cases.

The quantitative analysis found that the overall expected number of cases would be 143.2 cases in census tract 16.01 when compared to the entire California population. The SIR was 0.8 with a 99% Confidence Interval of 0.6-1.0, indicating a lower number of cancer cases than were expected. Additional analyses were conducted on 30 cancer sites individually. Six resulted in an SIR above 1.0, but none of the results were statistically significant, indicating no excess of cancer. Similar results were found when analyses were restricted just to Hispanics/Latinos.

Due to the concern of birth defects, an additional analysis focused just on children (defined as less than 15 years old) in census tract 16.01. Five children were diagnosed with cancer and 2.8 cases were expected, but the results were not statistically significant (SIR=1.8, 99% CI=0.4-5.1).

As census tract 12.00 is adjacent to census tract 16.01 and similar in demographics and land use patterns, the same analysis was conducted in this census tract for comparison purposes. In this census tract, the SIR was elevated, but not statistically significant (SIR=3.1, 99% CI=0.02-23.4). Lastly, due to the environmental concerns of the residents, census tract 17.01 was examined and the overall SIR was 0.7 (99% CI=0.6-0.8) and the SIR for children was 1.1 (99% CI=0.1-5.3).

Conclusions

Overall, the cancer incidence patterns found in census tract 16.01 during 1996-2008 were similar to what would be expected when compared to the overall California population. The same result was found for childhood cancer incidence. CCR concluded that although cancer is being diagnosed in this area, there is no sign of excess cancer incidence or unusual patterns overall and in children.

PHI's cancer epidemiologist and other researchers reviewed the analyses performed by CCR and were in agreement with the methodology, as well as subsequent interpretation and presentation of results. An updated analysis was performed by PHI to examine cancer incidence since CCR conducted their analysis. Using the same methodology as CCR, PHI conducted an analysis reviewing cancer cases from 1996-2014, adding an additional six years of cancer incidence data (2009-2014) to CCR's original dataset for census tract 16.01. These analyses did not result in different findings from the original analyses conducted by CCR. These data analyses are available upon request.

Summary: California Environmental Protection Agency: Kettleman City Community Exposure Assessment

Background

The CalEPA is California's legal authority regarding "...air, water and soil quality, pesticide use and waste recycling and reduction".³

Due to the concern about the number of children born with birth defects, CalEPA was directed to conduct an environmental assessment of Kettleman City in 2010. CalEPA and CDPH reported attending public meetings in Kettleman City to discuss the investigation and any health concerns the residents had. CalEPA proposed testing the air, groundwater, and soil in Kettleman City to assess the level of chemicals.

Kettleman City is surrounded by agricultural land, situated between two oil fields, in close proximity to canals and the California Aqueduct, and is 3.5 miles away from the Chemical Waste Management Kettleman Hills Facility.

Methods

A comprehensive list of chemicals and pesticides to be tested was compiled based on evidence of causing birth defects. Location, ease of detection, and likely presence were considered when developing the list. The final list for investigation included 35 chemicals and pesticides. Additional chemicals and pesticides (about 120) that are routinely collected and monitored, but do not necessarily have a known association with birth defects, were also tested. The California Air Resources Board (ARB), the California Department of Pesticide Regulation (DPR) and California Department of Toxic Substances Control (DTSC) were involved in the Kettleman City monitoring and testing effort.

The ARB had three monitoring sites: Kettleman City Elementary School, and the upwind and downwind monitoring stations of the Chemical Waste Management's Kettleman Hills Facility. Air monitoring, wind speed, direction of the wind, and temperature were collected at these sites.

The DPR used monitoring and computer modeling to estimate the concentration of pesticides in the air. DPR reported that due to time constraints, computer modeling was primarily used for the Kettleman City assessment to assess pesticide air concentration. By using computer modeling, DPR can assess pesticide use from previous years, whereas air monitoring would assess current conditions. Air monitoring would not account for pesticides that may have been used in the past. Air monitoring was used to test for methyl isothiocyanate and 26 other pesticides.

All the soil, soil gas, water, and sediment sampling was done by DTSC. Most samples came from within Kettleman City, but some surface water samples and agricultural samples were taken outside Kettleman City. Thirty-seven soil samples were taken from residents (averaging four from each home), 18 taken from areas adjacent to agricultural fields, and another four from various areas around the community. Soil samples were primarily tested for metals and organochlorine pesticides and a selected number of samples were tested for polychlorinated biphenyls (PCBs). Soil gas samples were taken and analyzed for volatile organic chemicals, methane, and hydrogen sulfide from nine residences, the Kettleman Elementary School, the Kettleman City County Fire Station, and six commercial properties. DTSC also collected water samples, including tap water

³ <https://www.calepa.ca.gov/about/>

from 11 residences, vending machine water in front of the Kettleman City Market, two municipal wells, the Kettleman City Elementary School well, the California Aqueduct, and an agricultural drainage canal.

Lastly, the Office of Environmental Health Hazard Assessment (OEHHA) conducted a risk assessment to identify chemicals in the environment that have the potential to cause birth defects. Then, DPR conducted a risk assessment on pesticides that have the potential to cause birth defects. If the chemical or pesticide levels in the environment were lower than the health-based criteria, OEHHA and DPR concluded that no health effects should be expected. Risk factors for asthma and cancer were also evaluated.

Results and Conclusions

The test results of the air, water, soil, and soil gas concluded it was unlikely that any exposure to the hazardous chemicals tested could be associated with birth defects. CalEPA did not conclude that Kettleman City's environmental conditions (environmental pollutants in the air, water, and soil) were unusual for its geographic region. All results were comparable to environmental conditions in other San Joaquin Valley cities.

In regards to potential agricultural exposures, the risk of birth defects from pesticides was reported to be low during September 2006-December 2009, and all of 2010. There was only one day where the air concentration of one pesticide exceeded the screening level for being a risk factor of birth defects.

The air monitoring upwind and downwind of the Chemical Waste Management Kettleman Hills Facility and the Kettleman City Elementary School showed normal concentrations of contaminants in the air. The results were compared to Bakersfield and Fresno, and no major differences were found.

High levels of arsenic that exceeded California water standards were found in the community's drinking water. The report stated it was unlikely this was a factor in children being born with birth defects, as most mothers interviewed said they did not use the tap water as a source for drinking water. Lead was detected in the well at the Kettleman City Elementary School, but the levels of lead were common in California and were deemed not to be a risk factor for the community.

No evidence of illegal dumping of automobiles or trash, or petroleum sources posing a risk, were found. The soil and soil gas sampled at houses did have high levels of one contaminant (arsenic). The levels of arsenic found were consistent with levels found in California and other communities in the San Joaquin Valley. One household did have high levels of chlordane; CalEPA said this house did not pose a risk to the community.

Lastly, in regards to the California Aqueduct, canals, and agricultural soils, arsenic and lead were detected in the aqueduct and canals, but the levels were below levels of health concern. No health concerns were found in the agricultural soil.

Based on the results found, CalEPA recommended the following:

1. Continue the pursuit of a new source of drinking water for Kettleman City.
2. Further investigate the lead contamination in the well that supplies water to the Kettleman City Elementary School.
3. Continue the assessment, and if needed, mitigation measures for applications of the pesticides.
4. Suggest that ARB should work with the San Joaquin Air Pollution Control District to evaluate if the benzene emissions from the air stripping units at the southwest municipal water wells.
5. Further investigate the chlordane contamination at one of the homes.

PHI Key Informant Interviews

Background

To inform the Kettleman City Community Canvass protocol, survey design, and outreach plan, PHI conducted Key Informant Interviews with a variety of stakeholders and organizations involved in the original Kettleman City investigation.

Methods

The Key Informant Interview Guides are available in the Appendix.

Key Informant Interviews were conducted with:

- A community activist and current resident of Kettleman City
- A former resident of Kettleman City who assisted with the original investigation
- A group key informant interview with representatives from the CDPH, including the CCR, CBDMP, CalEPA
- A nonprofit public health professional with project and program experience in Kettleman City
- A Health Educator with the CDPH EHIB who was involved with the original investigation
- A former CCR epidemiologist who was involved with the original Kettleman City investigation

Results

Interviews were conducted in 2016. All interviews were conducted in English. As a result of these interviews, a final list of community concerns to obtain further feedback from Kettleman City residents was developed:

Community Concern List

1. Asthma
2. Birth Defects
3. Pesticides
4. Learning Disabilities in Children
5. Air Quality
6. Health Care
7. Job Opportunities
8. Cancer
9. Miscarriages
10. Street Lights
11. Stray or Loose Dogs
12. Crime
13. Streets (Curbs/Gutters/Sidewalks/Stoplights/Potholes)
14. Water Quality
15. Planned water treatment plant
16. Changing Water Rates
17. Immigration Issues

PHI Kettleman City Community Canvass

Background

PHI designed a study protocol which aimed to reach out to each individual address in Kettleman City to speak with at least one adult about their community priorities in Kettleman City. This served as a follow up to the survey completed in 2009-2010 by the LAC. Using data from that survey, as well as data collected from Key Informant Interviews with community stakeholders, state government agency staff, and others who contributed to the original Kettleman City investigation, this project followed up on previous concerns and documented potential new concerns for residents of Kettleman City.

Methods

Institutional Review Board (IRB) approval was obtained by the Public Health Institute's IRB.

PHI requested a complete list of residential households in Kettleman City from the Kings County Public Health Department. Six bilingual data collectors with extensive training in survey interviewing techniques were convened to canvass the entire city of Kettleman City going door to door. Two weeks prior to the canvass effort, a local *promotora* distributed promotional flyers and engaged with residents via word-of-mouth and social media regarding the project. An invitation to a community forum was handed out by the *promotora*, inviting community members to attend a Meet and Greet, where they had the opportunity to meet the data collectors. Two pages, one in English and one in Spanish, were set up on the Survey Research Group public website where flyers, frequently asked questions, and materials were posted. A specific email address for the Kettleman City project with a corresponding Google Voice number with a local Kettleman City area code was also established.

The survey was developed based on feedback from the key informant interviews, corresponding community surveys, and other national health surveys, including:

1. Bell-Sheeter, A. (2004). Food Sovereignty Assessment Tool. Indigenous Food Systems Network: <http://www.indigenousfoodsystems.org/sites/default/files/tools/FNDIFSATFinal.pdf>
2. Centers for Disease Control and Prevention. 2013 Behavioral Risk Factor Surveillance Survey (BRFSS). http://www.cdc.gov/brfss/questionnaires/pdf-ques/2014_brfss.pdf
3. California Health Interview Survey. (2013-2014). University of California, Los Angeles Center for Health Policy Research. Retrieved 24 09, 2015, from California Health Interview Survey (CHIS): <http://healthpolicy.ucla.edu/chis/design/Documents/chis2013adultquestionnaire.pdf>
4. SouthGate Community Environmental Health Assessment Team (CEHAT). SouthGate Health and Environment Community Survey: Your Health and Your Environment in SouthGate: WHAT DO YOU THINK?
5. GreenAction. Kettleman City Community Health Survey.
6. National Association of County and City Officials. (2000). Protocol for Assessing Community Excellence in Environmental Health. Center for Disease Control and Prevention.

The survey was pilot tested with public health workers, community members, and bilingual survey interviewers. Pilot testing was done in English and Spanish.

To conduct the canvass, Kettleman City was divided into three geographic areas. Three sets of data collectors went out in tandem pairs to each section. Every household was to be approached two times over the following four days:

- Wednesday 4/5/2017
- Thursday 4/6/2017
- Friday 4/7/2017
- Saturday 4/8/2017

Households were approached between the hours of 9:00AM to 6:00PM on weekdays, and 12:00PM to 5:00PM on Saturday.⁴

Data collectors approached each house in a consistent, standardized way following the canvass' data collection protocol. Personal safety, the presence of dogs, fence enclosures, and the handling of all data collection equipment and documentation was covered in a training for all data collectors and available to them in the field. Training and certification in human subjects protection is held by every staff member.

While in the field, data collectors recorded the outcome of each house visit using disposition codes. Possible disposition codes for each household included:

- N18 No One 18 Years or Older Home
- NA No One Home
- DN Did Not Approach
- RR Soft Refusal
- VA Vacant House/Non-Existent Address
- RF Final Refusal
- CP Completed Interview
- NR Non-Residential Address

If a house was assigned a disposition of RF, CP, NR, or VA, a second attempt was not made. All other households with a disposition of N18, NA, DN, or RR were approached a second time on an alternate day.

The protocol dictated that every household was to be assigned a disposition. After one survey had been completed at a household, data collectors were instructed to not return. If, after completing an interview at a household where the participant indicated that there was another person who is not home that would like to complete a survey, data collectors were instructed to state they would attempt to return back at the end of the data collection period but must make all attempts at other houses first. If a household had questions or concerns that the data collector could not answer, the data collectors provided contact information for the Principal Investigator, Dr. Marta Induni, for follow-up questions or concerns.⁵

Quantitative data was collected using QuickTapSurvey software on iPads. Qualitative data was captured using voice recorders. Informed consent was obtained prior to conducting the survey from each adult. A thank-you card with information about the study and PHI contact information was provided to each participant at the conclusion of an interview.

⁴ On Wednesday 4/5/17, data was collected until 7:00PM. After feedback from a community member on this day, data collection was concluded at 6:00PM for the remaining weekdays (Thursday and Friday).

⁵ Dr. Induni is a native Spanish speaker.

Results

The Kings County Department of Public Health provided a list of 275 residential households in the city proper of Kettleman City to PHI. During the canvass, data collectors identified an additional 69 houses that were not included in the original list from Kettleman City, bringing the final sample of households to 344.

Household Attempts

Of these 344 dispositions, 16 houses were vacant or did not exist, and 13% (n=45) were deemed a non-residential address. Of the 283 non-vacant, residential households, 71 interviews were completed at 69 households. Each house received up to two attempts to reach an adult over the age of 18 willing to participate in an interview until a final disposition code could be assigned.

Final Dispositions per Household		
Disposition	n	%
Completed Interview	71	21%
Did Not Approach Home	24	7%
No One 18 Years or Older Home	4	1%
No One Home	143	41%
Non-Residential Address	45	13%
Final Refusal	28	8%
Soft Refusal	15	4%
Vacant House/Non-Existent Address	16	5%
Total	344	100%

Demographics

The majority of respondents were Hispanic or Latino (99%), female (75%), and between 18-39 years old (39%). Almost three quarters (75%) did not have a high school diploma. The majority of the interviews (80%) were conducted in Spanish.

Demographics of Participants (n=71)		
Variable	n	%
Gender		
Male	18	25%
Female	53	75%
Age		
18-39 years old	28	39%
40-59 years old	23	32%
60+ years old	19	27%
Refused	1	1%
Race/Ethnicity		
Hispanic/Latino	70	99%
White	1	1%
Lived in Kettleman		
1-10 years	18	25%
11-20 years	15	21%
21-30 years	17	24%
31-40 years	13	18%
More than 40 years	8	11%
Interview Language		
English	14	20%
Spanish	57	80%
Educational Level		
Eighth grade or less	39	55%
Some high school	13	18%
High school / GED	13	18%
Some college	5	7%
College graduate	1	1%

Health Communication

About one-fifth of participants (20%) reported they received information about environmental issues from a medical clinic. Other common responses included television, newsletters, and schools.

Where do you get your information on health and environmental issues in your community?		
Variable	n	%
Clinic	14	20%
Television	12	17%
Newsletters	8	11%
School	8	11%
Kings County	6	9%
Family	5	6%
Medical Professional	4	6%
Community Center	3	4%
Internet	2	3%
Work	2	3%
News	2	3%
Mail	2	3%

Only variables with two or more responses are displayed in this table. One participant refused this question. Participants were allowed to select more than one category.

When asked how they would prefer to receive information on health and environmental issues, nearly half (49%) of participants reported they preferred handouts, such as newspapers, brochures, or magazines. About a third (28%) said they preferred word of mouth from a county, state, or medical representative.

How do you like to receive information on health and environmental issues in your community?		
Source	n	%
Handouts (e.g., newspapers, brochures, magazines)	35	49%
Word of Mouth from a county, state, or medical employee	20	28%
Other	12	17%
Television	10	14%
Radio	5	7%
Word of Mouth from a community member, family member, friend, church leader, etc.	4	6%
Internet	3	4%
Participants were allowed to select more than one category.		

Community Concerns

Participants were asked to select three issues from the provided list (n=17) that were most important to their household (see Appendix for the list of provided issues).

The most commonly selected concerns included water quality, air quality, streetlights, streets (including curbs, gutters, lack of sidewalks, stoplights, and potholes), stray or loose dogs, and pesticides. For all of these top concerns, at least two-thirds of respondents indicated that they were highly concerned about the issue. The majority of participants who selected these issues also indicated that they felt the condition or risk was worsening or staying the same (as opposed to improving).

Priority Concerns and Trends of Concerns for Kettleman City Canvass Participants (n=71)										
Issue	Top 3 Concern?		Concern Level*				Trend*			
	n	%	High	Medium	Low	Don't Know	Improving	Same	Worsening	Don't Know
Water Quality	46	65%	80%	13%	4%	2%	9%	42%	42%	7%
Air Quality	21	30%	80%	15%	5%	0%	20%	55%	25%	0%
Streetlights	21	30%	86%	14%	0%	0%	10%	38%	52%	0%
Streets	20	28%	65%	35%	0%	0%	30%	40%	30%	0%
Stray/Loose Dogs	16	23%	63%	38%	0%	0%	25%	50%	19%	6%
Pesticides	14	20%	71%	21%	7%	0%	21%	57%	21%	0%
Asthma	10	14%	80%	10%	10%	0%	20%	30%	50%	0%
Health Care	10	14%	50%	30%	20%	0%	30%	30%	40%	0%
Water Treatment	10	14%	90%	10%	0%	0%	20%	60%	20%	0%
Jobs	8	11%	88%	0%	0%	13%	13%	50%	38%	0%
Cancer	8	11%	71%	29%	0%	0%	43%	29%	14%	14%
Birth Defects	6	8%	83%	0%	17%	0%	67%	17%	17%	0%
Immigration Issues	6	8%	67%	17%	17%	0%	33%	17%	50%	0%
Learning Disabilities	5	7%	60%	40%	0%	0%	20%	60%	20%	0%
Crime	5	7%	80%	20%	0%	0%	60%	0%	40%	0%
Water Rates	3	4%	33%	67%	0%	0%	100%	0%	0%	0%
Miscarriages	0	0%	0%	0%	0%	0%	0%	0%	0%	0%

*Percentages may not add to 100% due to rounding.

Priority Concerns and Selected Quotes from Kettleman City Canvass Participants (n=71)			
Issue	Top 3 Concern?		Select Participant Quotes
	n	%	
Water Quality	46	65%	<i>Sale muy fea. Para tomar no sirve. Tampoco para bañarse se me cae el pelo... sale muy café.</i> [It comes out very ugly. It's not good to drink. Neither for taking a shower, my hair falls out... It comes out really brown.]
Air Quality	21	30%	<i>Vale más estar uno encerrado y adentro no huele.</i> [Its best to be closed indoors and it doesn't smell inside.]
Streetlight	21	30%	<i>We should have nice streets and city lights and everything else that the other bigger towns have.</i>
Streets	20	28%	<i>Look at our streets. They're not even drivable much less walkable.</i>
Dogs	16	23%	<i>Y los perros pues es un peligro para la gente mayor... hasta para los niños chicos.</i> [And the dogs, its dangerous for the elders, even for the little kids.]
Pesticides	14	20%	<i>En ocasiones hay veces que lo hacen de noche... cuando todos estamos durmiendo.</i> [On occasions, there are times they do it at night...when we are all sleeping.]
Asthma	10	14%	<i>Yo tengo asma, mis vecinos tienen asma, los niños tienen asma... por las contaminaciones de pesticidas.</i> [I have asthma, my neighbors have asthma, the children have asthma due to pesticide contamination.]
Health Care	10	14%	<i>Mucha gente que no tiene cobertura médica, no tiene aseguranzas, no tiene nada.</i> [A lot of people don't have health coverage, don't have insurance, they don't have anything.]
Water Treatment	10	14%	<i>El tratamiento de agua es lo principal, muchos ocupamos el agua para bañarnos y el agua sale muy mal.</i> [Water treatment is the main thing, many of us need the water to bathe and the water comes out really bad.]
Jobs	8	11%	<i>I've lived here my whole entire life and I've never seen infrastructure or jobs created in this town.</i>
Cancer	8	11%	N/A
Birth Defects	6	8%	<i>Los niños salen defectuosos por el aire... y eso pues es malo.</i> [The children are born with defects because of the air and that's bad.]
Immigration Issues	6	8%	<i>Yo quisiera que hubiera pues más oportunidades para los inmigrantes, y que no hubiera tanta discriminación y racismo ni nada.</i> [I would like more opportunities for the immigrants and not as much discrimination and racism or anything.]
Learning Disabilities	5	7%	<i>Se van a sentir menos... no tienen la capacidad para aprender igual.</i> [They're going to feel less of themselves, they don't have the capacity to learn the same.]
Crime	5	7%	<i>The crime would be the worst because it's pretty bad... you send your kids to school and you don't know if they're going to be okay.</i>
Water Rates	3	4%	<i>Our water bill is the same every month. It's a little bit short of \$80 a month and the water's no good!</i>
Miscarriages	0	0%	N/A

Why are you concerned about these issues?

Participants most commonly reported being concerned about the health priority issues they named due to their impact on children's health and safety, their family's health and safety, and their neighbor's health and safety. Participants described:

“Los perros - para mis hijos - que no pueden salir porque están los perros aquí de un lado. Para ir a la tienda, pues no, no pueden salir ni para la escuela porque se me regresan.”

The dogs – for my children – they cannot go out because the dogs are right here. To go to the store, well, no, they cannot go out, they can't even go to school because they come right back.

“Para mí es porque yo tengo asma, mis vecinos tienen asma, los niños tienen asma a consecuencia, creo yo, que es por las contaminaciones de pesticidas.”

For me, it is because I have asthma, my neighbors have asthma, the children have asthma, and I believe it's because of the contamination caused by pesticides.

Participants expressed concern about the health impacts of air and water quality that they described as sub-standard. For example, participants described the water as

“Siempre sale sucia, siempre esta amarilla,”

Always comes out dirty, it's always yellow

“El agua está muy fea, muy negra”

The water is very ugly, very black

“A veces viene bien sucia [el agua], bien café el agua, no se puede usar para bañarse.”

Sometimes, the water comes out very dirty, very brown, and you cannot use it to bathe.

Participants had anxiety about possible negative health consequences of the water in the future:

“El agua me preocupa también porque yo sé que no la consumimos, la que sale de la llave, pero nos lavamos las manos, nos bañamos, no sé si tenga algo malo en el futuro para uno.”

The water worries me also because I know we do not drink it, what comes out of the tap, but we wash our hands with it, we bathe with it. I don't know if the water might have something bad in it that will affect us in the future.

Participants were concerned about air quality, and mentioned the following reasons why:

“Veo que ya cada rato pasa la sombra de los aviones. Echan pura química [pesticidas].”

I see the shadows of planes that are passing overhead all the time releasing chemicals [pesticides].

“Huele muy feo, dolores de cabeza muy fuertes y pues para mí por eso es una de las más importantes.”

It smells very bad, I get strong headaches, and this is for me, one of the most important concerns.

Participants frequently mentioned feeling concerned because they felt people who do not live in Kettleman City, including government officials, do not understand the daily nature of life in Kettleman City. For example, one participant explained:

“They probably don't know that we don't have lights because they don't have a voice over here.”

Another participant expressed feeling alone:

“We’re on our own in unincorporated America.”

The following participants mentioned feeling neglected:

“Kettleman city is a small town, small community, but just because we’re small like this, and we live out on [sic] the middle of nowhere doesn’t mean that we’re not human beings. We need to have Kettleman City fixed up.”

“Well, out here we pay a large amount of taxes from this vicinity...and we get nothing. We get no police, no roads.”

“Como yo miro que en Hanford tienen las calles bien y las reparan sin tener necesidad y este pueblo que necesita que lo atiendan más lo ignoran.”

I see that in Hanford, they have nice streets and they repair them even when they don’t really need repairs, and this town [Kettleman City] that needs help so badly, they just ignore it even more.

“Yo pienso que el condado tiene que poner más prioridad en este pueblo abandonado.”

I think that the county has to place more priority in this abandoned town.

Another participant gave the following example of the lack of adequate paved roads:

“You get off the road here, you could have a brand new car and in about 30 days it would be a piece of junk.”

Items of Concern Not in Original List

During the interviews with community residents, interviewers asked participants to choose three items from a 17-item list. They asked a follow-up question to allow participants to tell us about additional issues that were important for community health priorities that were not in the 17-item list. Fifteen participants mentioned additional items not in the 17-item list as important for community health priorities. Items included issues related to community security (police), government involvement, and infrastructure (housing, garbage dump) in Kettleman City.

Additional Items of Concern	
Issue	Quote*
Allergies	No quote available.
ChemWaste	<i>“Eliminando la planta esa.”</i> [Eliminating that [ChemWaste] plant.]
Diabetes	<i>No quote available</i>
Drugs	<i>“They’re selling a lot of drugs and you know it. Everybody knows who is selling drugs here, it’s not a secret.”</i>
Police harassment	<i>“I would like to see either the police more engaged with their practices or...how we would like to see them patrol our community.”</i>
Garbage dump (bad smell)	No quote available
Housing (crowding, unpermitted housing, landlords not fixing homes for renters, yard maintenance, burnt homes)	<i>“Porque mucha gente vive así como bien amontonadas las casas.”</i> [Here, many people live in houses that are very crowded.] <i>“We have these houses burnt down, nobody’s taking care of them.”</i>
Lack of county government involvement	<i>“Bluntly just get some of the people from the county to get up off their butts and get out here and take care of it.”</i>
Lack of police	<i>“Casi no hay policías aquí.”</i> [There are hardly any police here.]
Pest issues (e.g. cockroaches, plague)	<i>“[Las cucarachas] traen enfermedades también.”</i> [Cockroaches transmit disease, too.]
Racism	No quote available.
Traffic on Highway 41	No quote available.

*Quotes not available for the issues reported in interviews where the participant did not consent to be recorded.

What do you like most about living in Kettleman City?

The most common reasons that participants liked living in Kettleman City were because it is calm and tranquil, and a small town. Some participants also said they liked living in Kettleman City because it was affordable and provided opportunity for frequent work. Some mentioned Kettleman City’s conservative values as the main

reason they liked living in Kettleman City. Only one participant said s/he did not like living in Kettleman City, but lamented that s/he “had to live here” for reasons s/he did not explain.

Many participants mentioned that they liked living in Kettleman City because it was calm and tranquil, and a person could live well there. Specific examples that participants mentioned were that the town was calm and tranquil because it was quiet, full of hard-working people, did not have many fights, did not have much crime/vandalism, and did not have much traffic. For example:

“Es tranquilo, se puede vivir bien. A menos yo veo que es tranquilo.”

It's tranquil, you can live well. At least for me, it's tranquil.

“It's peaceful, quiet...[I] know everybody.”

“Hay gente pacífica que no andan peleando.”

There are peaceful people that do not go around fighting.

Participants also mentioned they liked that Kettleman City was a small town. One resident explained:

“I like that everybody knows who lives in town. It's a small community. People know each other.”

Participants also mentioned they liked living in Kettleman City because the rent was affordable and there were jobs close by in the fields. Some examples follow:

“En realidad, vives tranquilo. Es más accesible por decir pagar una renta.”

Really, you live calmly here. It's more affordable, meaning paying the rent.

“Aquí pues todo el tiempo hay trabajo. Sobre todo en el fil, toda la gente, la mayoría trabajan en los files. Y es lo bien que yo veo que todo el tiempo hay trabajo.”

Around here there is always work. Especially in the fields, all the people, the majority of the people work in the fields. And this is what I see as good that all the time, there is work.

A few participants mentioned that they liked living in Kettleman City because of its conservative values. One participant explained:

“Very conservative values so it's a really good place to raise a home.”

What is the hardest part about living in Kettleman City?

The most common reasons that participants found living in Kettleman City hard were because it is far from services and lacks access to food markets, health centers, and pharmacies. Other reasons that participants mentioned made it hard to live in Kettleman City were the water quality, crime, and lack of activities for young people to do. Only one participant said there was nothing hard about living in Kettleman City.

Many participants mentioned that Kettleman City was far from many services that are important for health, including food markets, medical care, and pharmacies. One participant explained:

“The hardest part is the distance to everything. Hospitals, groceries, everything...you name it...we are so far away.”

Some participants mentioned having to go as far as Hanford to access services, including medical care and pharmacies.

“Este no más está la clínica de lunes a jueves; viernes. Sábado y domingo no hay doctor y es cuando tenemos que ir a Hanford.”

The clinic [in Kettleman City] is only open from Monday to Friday. Saturday and Sunday, there is no doctor and that is when we have to go to Hanford.

“Primeramente el transporte como para ir hasta Hanford o Lemoore para comprar su mandado o para ir a la botica.”

The most important is transportation to be able to go to Hanford or Lemoore to be able to buy your groceries or go to the drugstore.

Some participants reported that food was available in Kettleman City markets, but at much higher prices than at the food markets in larger cities such as Hanford. One participant explained:

“Si venden aquí pero no es igual porque son tiendas chiquitas. Y aquí va uno a la tienda y ajusta para traer nada porque todo está más caro. Con 20 dólares apenas para unas dos o tres cositas y esta carísimo.”

Yes, they sell [food] here but it's not the same because the stores are small. And here, you go to the store don't have enough to buy anything because everything is more expensive. With 20 dollars you can hardly buy two or three little things, and they are very expensive.

Participants stated that having access to water that they believed was unsafe to drink and visibly dirty was one of the most difficult concerns about living in Kettleman City. One participant explained:

“Pues lo más difícil...es el agua. El agua que realmente no sirve y que deben de mejorarla.”

Well, the most difficult part...is the water. The water really is useless and they should improve it.

Another participant described refusing to drink the water or give it to her family:

“Since I remember my dad would bring us water from a different place so that we wouldn't drink it, and when I had my children, we wouldn't drink the water.”

Crime was another common theme that participants said was a difficult aspect of living in Kettleman City. Participants mentioned that the police presence was not adequate in Kettleman City. One participant described an experience s/he had when the police came too late:

“Una emergencia no vienen a tiempo. Aquí se nos metieron hace muchos años, tres chavalos que venían en una ganga de Oakland y el policía llegó como a las tres horas...no hay policías, no nunca hay. Ese también es una preocupación por que una emergencia de aquí a que vengan de Hanford o Lemoore llegan tarde.”

In an emergency, [the police] do not come in time. They broke into our house many years ago, three guys who came from an Oakland gang and the police arrived like three hours later...there are no police here, there never is. That is also a worry because in an emergency here, they have to come from Hanford or Lemoore and they arrive late.”

A few participants mentioned that there was nothing for the youth to do in Kettleman City. One participant said:

“There's nothing to do here. What do the youth do? Where do they go? There's nothing to do nothing. The schools closed, it's gated. There's a small park but that's it. Where do the kids go?”

If could tell the County Health Department anything, what would you tell them?

Most participants wanted to tell the County Health Department that their access to healthcare is sub-standard. This occurs for many reasons, including lack of access to doctors and pharmacies. Some participants described the lack of access to healthcare in the following ways:

“We have no access to health or healthcare other than 35 miles away and those that don't have a ride, it's real hard. They do send a trailer - a mobile trailer - but it only has bandages and headache medicine, but there's nothing they can do really. Literally nothing. So we have no access to healthcare other than we have to drive 35 miles away.”

“Que pusieran más cosas aquí como farmacia para no ir tan lejos, un doctor que este todos los días.”

That they put more things here like a pharmacy to not go so far, a doctor that is here every day.

“Casi no acudo a las clínicas aquí pero tengo entendido que no más vienen como dos o tres veces por semana, y si estuvieran aquí una clínica permanente estaría bien.”

I practically don't go to the clinics here because as I understand it, they only come two or three times a week, and if they had a permanent clinic here, that would be fine.

One participant explained that the clinic in Kettleman City lacked access to specialty physicians, such as ophthalmologists and dentists.

Many participants said lots of help is needed and they expect the County Health Department to help them. Many participants felt that action needs to happen and the government should help Kettleman City improve its infrastructure. Some participants expressed frustration. For example:

“Why isn't anybody doing anything?”

“Do something! Help our town! Don't act like we don't exist.”

“Pues que pongan más atención y trabajen más en este pueblo que como quiera también pagamos taxes.”

Well, they should pay more attention and work more on this town, because we also pay taxes.

“I'm sure people pay taxes. Somebody owns these houses. We pay property taxes. So why are we not getting any help?”

“We need help! SOS! Send some help to unincorporated Kettleman City CA...It's been forgotten for too long...Look at how much money has been allocated to Kettleman City in the last 30 years and that's your answer.”

Some participants simply wanted to make sure the County Health Department knew that Kettleman City needed its streets repaired and its water clean. For example:

“Les diría que hicieran lo posible por componer más nuestra ciudad, que miren nos han compuesto las calles verdad.”

I would tell them that they should do all that is possible to improve our city, that they see with their own eyes that they have truly fixed our streets.

“Lo que más me preocupa, el agua que no sirve.”

What worries me the most, the water is worthless.

Although many participants felt access to healthcare, such as clinics and pharmacies, was not adequate in Kettleman City, one participant felt that healthcare services were adequate:

“Tenemos una clínica aquí y yo creo que está bien, porque...gracias a Dios tenemos una clínica y hay buenos servicios.”

We have a clinic here and I believe it's fine, because...thank God we have a clinic and there are good services.

Very few participants said they would tell the County Health Department nothing.

Conclusions and Recommendations

What is your suggested solution?

Many participants expressed that Kettleman City needed a voice and money. Participants felt that they did not have a voice, and that their community's needs were not heard by government officials. Participants felt that if Kettleman City had civil representation, such as a mayor, it would improve the issues of concern that had been identified in the Canvass. Although a current representative exists (the Kings County District 2 Supervisor), some participants felt that Kettleman City had no civil representation. For example, one participant spoke about Kettleman City:

“For a country that promotes free liberties and political movement to not have representatives in the town of 1,500 people [Kettleman City], you're limiting our liberties, our political engagement.”

Participants felt that Kettleman City did not receive enough money for infrastructure projects. Also, if money is allocated, residents from Kettleman City could be tapped to oversee the funds. One participant provided the following solution:

“Again we need money! And I don't even know if we have a budget or if they're allocating funds this way, so unless we have an actual budget and somebody who can oversee these [infrastructure] projects, we're getting nowhere.”

This need can be addressed in several ways: Inform Kettleman City residents of their designated representative (the Kings County District 2 Supervisor), create a position for a Kettleman City mayor, and/or host visits by the county government or district representative to Kettleman City to speak with residents and observe the conditions, and dedicate funding for projects that will improve Kettleman City's infrastructure.

Participants also expressed pragmatic solutions related to issues of concern. The most common issues and their accompanying solutions related to streetlights, water quality, and pesticides. Other issues that were mentioned included stray or loose dogs and healthcare. The solutions proposed by the participants fall into two large categories: solutions that could be implemented by the government, and work-arounds that could be implemented by the residents.

Issue	Government-implemented solution	Community resident-implemented solution
Streetlights	Install new streetlights Fix broken streetlights	Leave outdoor lights on
Water quality	Announce when the water will be dirty Change source of water	Use water filters Don't use water
Pesticides	Require businesses to spray non-harmful pesticides Spray at night	Stay indoors
Stray or loose dogs	Spay or neuter dogs Fine owners who let their dogs loose	Keep dogs in the house or fenced in
Healthcare	Provide a clinic that is closer to Kettleman City (closest is 35 miles away) Provide a pharmacy – could be a pop-up pharmacy or mobile pharmacy	Take prenatal vitamins

For a few issues, residents felt the government could provide the best solution. That included issues related to streets (proposed solution: fix potholes) and learning disabilities. To address learning disabilities in children, the proposed solution was to hire teachers who know how to work with children who have learning disabilities.

Some participants felt that there was no solution to the issues of concern for the residents of Kettleman City face. One participant explained it this way:

“Well you can't shut the farmers down, and you can't keep people from spraying pesticides, so you can't solve it.”

Participant Rationale and Suggested Solutions for the Top 6 Concerns		
Issue	Why are you concerned about this issue?	How would you solve this issue?
Water Quality (65%)	<p>“<i>Siempre sale sucia, siempre está amarilla.</i>” [Always comes out dirty, it's always yellow,]</p> <p>“<i>El agua está muy fea, muy negra.</i>” [The water is very ugly, very black.]</p> <p>“<i>A veces viene bien sucia [el agua], bien café el agua, no se puede usar para bañarse.</i>” [Sometimes, the water comes out very dirty, very brown, and you cannot use it to bathe.]</p> <p>“<i>El agua me preocupa también porque yo sé que no la consumimos, la que sale de la llave, pero nos lavamos las manos, nos bañamos, no sé si tenga algo malo en el futuro para uno.</i>” [The water worries me also because I know we do not drink it, what</p>	<p>“<i>A mi me gustaría que dieran un aviso que nos digieran qué horas va a estar como más sucia el agua para uno no usarla.</i>” [I would like if they would give a notice, to tell us what time the water will be dirtier for one not to use it.]</p> <p>“<i>Lo que uso es agua de importados de botellas para mejorar algo el riesgo.</i>” [What I use is imported water bottles to improve some of the risk.]</p> <p>“<i>Que haga algo el gobierno porque son los que pueden solucionar esto.</i>” [The government should do something because they are the ones who can solve this.]</p> <p>“<i>Pues que nos dieran agua potable ya que no tenemos de pozo.</i>” [Well give us drinkable water since we don't have a well]</p>

Participant Rationale and Suggested Solutions for the Top 6 Concerns

Issue	Why are you concerned about this issue?	How would you solve this issue?
	<p>comes out of the tap, but we wash our hands with it, we bathe with it. I don't know if the water might have something bad in it that will affect us in the future.]</p>	<p>"Well, I would see if they could find how to give us water elsewhere." <i>"Del agua no sé, según que son los filtros del agua pero pues no han dicho nada."</i> [About the water I do not know, it seems they are water filters but they have not said anything.]</p>
<p>Air Quality (30%)</p>	<p><i>"Veo que ya cada rato pasa la sombra de los aviones. Echan pura química [pesticidas]."</i> [I see the shadows of planes that are passing overhead all the time releasing chemicals [pesticides].]</p> <p><i>"Huele muy feo, dolores de cabeza muy fuertes y pues para mí por eso es una de las más importantes."</i> [It smells very bad, I get strong headaches, and this is for me, one of the most important concerns.]</p>	<p><i>"Pues disminuyendo todo eso para que este mejor el aire."</i> [Well, decreasing all of that so the air is better.]</p> <p><i>"Mejorando el ambiente, el aire."</i> [Improving the environment, the air.]</p>
<p>Streetlights (30%)</p>	<p><i>"Pues mis preocupaciones... tengo niños y para andar caminando está muy oscuro, pues andar con ellos."</i> [Well, my worries...I have children and in order to walk where it's really dark, we walk with them.]</p>	<p><i>"Que pusieran luces. Que las calles estuvieran iluminadas con luz para que pueda uno andar en la calle caminando."</i> [That they would put lights. That the streets be illuminated with light so that once can walk on the streets.]</p> <p><i>"Direct funds to Kettleman City and let the people decide where to allocate it."</i></p> <p><i>"Pues yo diría que estando más al pendiente lo de la comunidad lo de que si se funde un foco pues arreglarlo luego luego."</i> [Well I would say that being more aware of the community; that if a bulb burns out, well fix it as soon as possible.]</p> <p><i>"Pues poner luces mercuriales para que haiga alumbrado en las esquinas de las calles."</i> [Well put mercurial lights so that there may be light on the corners of the streets.]</p> <p><i>"Prendidas las luces de afuera de la casa."</i> [Lights turned on outside of the house.]</p> <p><i>"Funds, direct funds to Kettleman City and let the people decide where to allocate it. I mean like I said no voice! We're Incorporated we have nobody talking to us so again it comes down to a voice."</i></p> <p><i>"If we had a clear voice could communicate to Kings County that we need funds, that we have no lights. They probably don't know that we</i></p>

Participant Rationale and Suggested Solutions for the Top 6 Concerns

Issue	Why are you concerned about this issue?	How would you solve this issue?
		<p><i>don't have lights because they don't have a voice over here. So it all goes down to we need a voice."</i></p>
<p>Streets (28%)</p>	<p><i>“Como yo miro en que en Hanford tienen las calles bien y la reparan sin tener necesidad y este pueblo que necesita que lo atiendan más lo ignoran.” [I see that in Hanford, they have nice streets and they repair them even when they don’t really need repairs, and this town [Kettleman City] that needs help so badly, they just ignore it even more.]</i></p> <p><i>“[Because of the street conditions] You get off the road here, you could have a brand new car and in about 30 days it would be a piece of junk.”</i></p>	<p><i>“Do something! Help our town! Don't act like we don't exist. We're here and we should have nice streets and city lights and everything else that the other bigger towns have. Why can't we have the same as them?”</i></p> <p><i>“Unless we have an actual budget and somebody who can oversee these projects were getting nowhere. With no money nobody is going to fix the streets.”</i></p> <p><i>“We have plenty of businesses that pay taxes. Unfortunately they pay them to Kings County and since we don't have representatives we get no money this way. So I would say that way direct some of the taxes this way.”</i></p> <p><i>“Well, I would fix them. Doing a partial pothole doesn't work.”</i></p> <p><i>“Que hubiera más ayuda para que pudieran arreglar las calles.” [That there would be more help to fix the streets.]</i></p> <p><i>“Que las calles estuvieran más limpias.” [That the streets would be cleaner.]</i></p> <p><i>“De las calles yo pienso que el condado tiene que poner más prioridad en este pueblo abandonado.” [About the streets, I think that the county has to prioritize this abandoned town.]</i></p> <p><i>"Ahora que pusieron las calles que en la escuela bien pues nos gustaría que el pueblo estuviera todo, todo igual para que el pueblo cambiará y si tiene que poner el condado unas reglas en cada casa que tiene que mantener sus yardas bien y limpias pues que den multas. Para que la gente se empiece a disciplinar."</i></p> <p><i>[Now that they put the streets at the school, well we would also like the entire town, all the same so that the town would change and the county would have to set rules in each house to keep their yards well and clean and give fines. So that people start following rules.]</i></p> <p><i>"Again we need money! And I don't even know if we have a budget or if they're allocating funds</i></p>

Participant Rationale and Suggested Solutions for the Top 6 Concerns

Issue	Why are you concerned about this issue?	How would you solve this issue?
		<p><i>this way, so unless we have an actual budget and somebody who can oversee these projects were getting nowhere. With no money nobody is going to fix the streets."</i></p>
<p>Stray/Loose Dogs (23%)</p>	<p><i>"Los perros - para mis hijos - que no pueden salir porque están los perros aquí de un lado. Para ir a la tienda, pues no, no pueden salir ni para la escuela porque se me regresan."</i> [The dogs – for my children – they cannot go out because the dogs are right here. To go to the store, well, no, they cannot go out, they can't even go to school because they come right back.]</p>	<p><i>"Bluntly just get some of the people from the county to get up off their butts and get out here and take care of it."</i></p> <p><i>"Pues más que nada hablando con las personas que tienen perros que no los dejen salir a la calle. Que los tengan en su casa."</i> [Well, more than anything talking to people who have dogs to not let them go out to the street. That they keep them at home.]</p> <p><i>"Pues que vengan a chequear y si ven perros en la calle que los levanten y multen a los dueños."</i> [Well have them come and check, and if they see dogs on the street that they take them and fine the owners.]</p>
<p>Pesticides (20%)</p>	<p><i>"Pues porque en la mañana a veces llega olor muy fuerte como cosas echadas a perder o así y es por el aire del ambiente que se viene de acá. Está muy corto."</i> [Well because in the morning sometimes there is a very strong odor like spoiled things or something like that and it's due to the air of the environment that comes from here. It is very short.]</p>	<p><i>"Pues la solución sería de que no vinieran a tirar más contaminaciones aquí a lo cerca."</i> [Well the solution would be that they did not come to throw more contamination here and nearby.]</p> <p><i>"Pues esprayar como están haciendo ahorita en las noches. Nada mas."</i> [Well spray like they are doing now at night. Nothing more.]</p> <p><i>"Los pesticidas, yo creo que los tuvieran que tener más controlados y que pusieran pesticidas que no fueran peligrosos para los humanos."</i> [Pesticides, I think that they should be more controlled and use pesticides that were not dangerous to humans.]</p>

An issue contact list was developed in conjunction with the Kings County Department of Public Health to disseminate at the final Community Forum. This brochure included contact information for the Kettleman City Community Services District, and various local government, nonprofit, and agency information for each of the 17 issues included in the Community Canvass Survey. Further, a Spanish-language graphic handout was developed to share results with participants of the Kettleman City Community Canvass. Both of these resources are available at www.s-r-g.org/KettlemanCity.

Appendices

Key Informant Interview Guide – Community

Key Informant Interview Guides *Guías de Entrevistas a Informantes Clave*

Community Interviews *Entrevistas a la Comunidad*

Introduction

The Public Health Institute has been hired by the Kings County Department of Public Health to interview Kettleman City community members regarding cancer and birth defects. Before we conduct this survey, we're interested in learning more from key stakeholders and community members in Kettleman City. You've been identified as someone who may be able to assist us in understanding more about these issues in Kettleman City. We'd like to speak with you for about 10-15 minutes to discuss our project and the concerns that Kettleman City residents have. Is now a good time to talk? (If not – get a best time/number).

Introducción

El Instituto de Salud Pública ha sido contratado por el Departamento de Salud Pública del condado de Kings para entrevistar a miembros de la comunidad de la ciudad de Kettleman con respecto al cáncer y defectos de nacimiento. Antes de llevar a cabo esta encuesta, estamos interesados en aprender más de los principales interesados y miembros de la comunidad en la ciudad de Kettleman. Usted ha sido identificado como alguien que puede ser capaz de ayudarnos a comprender más acerca de estas cuestiones en la ciudad de Kettleman. Nos gustaría hablar con usted por unos 10-15 minutos para discutir nuestros proyectos y las preocupaciones que tienen los residentes de Kettleman. ¿Sería un buen momento para hablar? (Si no, obtener un mejor tiempo/número).

Living/Housing/Residential History and Perceptions *Percepción e historial de residencia / Vivienda*

Do you currently live in Kettleman City? How long have/did you live in Kettleman City? Do you have family members currently residing in Kettleman City?

¿Actualmente, vive usted en la ciudad de Kettleman? ¿Cuánto tiempo tiene viviendo/ vivió en la ciudad de Kettleman? ¿Tiene familiares que residen actualmente en la ciudad de Kettleman?

What do you (think people) like most about living in Kettleman City?

¿Qué es lo que más le gusta de vivir en la ciudad de Kettleman?

¿Qué cree que a la gente le gusta más acerca de vivir en la ciudad de Kettleman?

What do you (think people) feel is hardest about living in Kettleman City?

¿Qué considera usted que es lo más difícil acerca de vivir en la ciudad de Kettleman?

¿Qué cree que la gente considera es lo más difícil acerca de vivir en la ciudad de Kettleman?

What are the strengths of your community?

¿Cuáles son las fortalezas de su comunidad?

What is lacking in your community?

¿Qué es lo que falta en su comunidad?

Cancer and Birth Defects

Cáncer y Defectos de Nacimiento

What do you know about cancer and birth defects in Kettleman City?

¿Qué sabe usted acerca de cáncer y defectos de nacimiento en la ciudad de Kettleman?

What has been done about cancer and birth defects in Kettleman City?

¿Que se ha hecho sobre el cáncer y defectos de nacimiento en la ciudad de Kettleman?

Is anything needed to help address cancer and birth defects in Kettleman City? (Probe if necessary: biomarkers, education, prenatal care, etc.)

¿Hay algo que se necesita para ayudar a abordar el cáncer y defectos de nacimiento en la ciudad de Kettleman?

(Si es necesario: marcador biológico, educación, cuidado prenatal, etc.)

What else do you want to tell us about cancer and birth defects in Kettleman City?

¿Qué más quiere decirnos acerca de cáncer y defectos de nacimiento en la ciudad de Kettleman?

What else do you want to tell us about living in Kettleman City?

¿Qué otra cosa quiere decirnos acerca de vivir en la ciudad de Kettleman?

Survey Input

Aporte de la Encuesta

We will be conducting a survey in Kettleman City next spring. We'll be going door-to-door to ask community members about their personal experience with birth defects and cancer, as well as their attitudes and perceptions about cancer and birth defects in Kettleman City. We'll also be asking basic demographic, household, socioeconomic, and health behavior questions. In addition to these topics, what other kinds of questions should we be asking residents in Kettleman City? (Probe: What would you recommend? What other kinds of questions should we ask? What other information should we collect from residents?)

Llevaremos a cabo una encuesta en la ciudad de Kettleman la próxima primavera. Vamos a ir de puerta en puerta para preguntar a los miembros de la comunidad sobre su experiencia personal con defectos de nacimiento y cáncer, así como sus actitudes y percepciones sobre el cáncer y defectos de nacimiento en la ciudad de Kettleman. También estaremos haciendo preguntas demográficas básicas, acerca del hogar, socioeconómicas, y de comportamientos de salud. Además de estos temas, ¿qué otros tipos de preguntas deberíamos estar haciendo a los residentes de la ciudad de Kettleman? (¿Qué recomendaría usted? ¿Qué otros tipos de preguntas debemos hacer? ¿Qué otra información deberíamos recopilar de los residentes?)

After we design the survey instrument, would you be willing to review a draft and provide us with feedback?

Después de diseñar el instrumento de encuesta, ¿estaría usted dispuesto a revisar el instrumento y proveernos comentarios?

Finally, do you have any recommendations on other community members that we should speak to, just as we have spoken to you, to get feedback on our survey?

Por último, ¿tiene usted alguna recomendación sobre otros miembros de la comunidad con que deberíamos hablar, tal como hemos hablado con usted, para obtener comentarios sobre nuestra encuesta?

I have a few demographic questions for you.

What is your age?

What would you consider to be your race/ethnicity?

What languages do you speak?

(Do not ask): Gender/Sex

Tengo un par de preguntas demográficas para usted.

¿Cuál es su edad?

¿Qué consideraría usted ser su raza/etnia?

¿Qué idiomas habla usted?

(No preguntar): Sexo/género

Key Informant Interview Guide – Epidemiology and Public Health Staff

Key Informant Interview Guide Epidemiological and Public Health Staff

1. What was your role, or your agency's, role, in the original Kettleman City Investigation?
2. What obstacles did you, or your agency, run into during the investigation and delivery of the results?
3. How were results presented to stakeholders?
4. How were results received by stakeholders?
5. Do you have any concerns about the current Kettleman City community survey PHI is conducting?
6. What suggestions do you have for PHI in regards to the community survey?
7. Are there any other agencies or individuals you recommend we speak with?

¡Queremos hablar con usted!

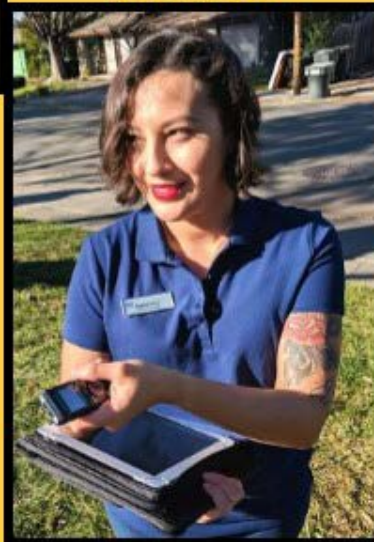
El Instituto de Salud Pública ha sido contratado por el Departamento de Salud Pública del condado de Kings para realizar entrevistas de salud comunitaria en Kettleman City.



Estaremos visitando hogares en Kettleman City **miércoles, 5 de abril 2017 a sábado, 10 de abril 2017**



- ◆ Les preguntaremos a adultos en cada hogar acerca de temas que son más importantes para ellos.
- ◆ ¡Su participación es muy importante! La participación es voluntaria, y los resultados serán compartidos con el Departamento de Salud Pública del condado de Kings.
- ◆ Las entrevistas serán conducidas en inglés y español por personal del Instituto de Salud Pública (PHI).
- ◆ Para obtener más información: www.s-r-g.org/Kettleman-espanol



Teléfono:
[\(559\) 406-9688](tel:(559)406-9688)
Correo electrónico:
KettlemanCitySRG@gmail.com
Sitio web:
www.s-r-g.org/Kettleman-espanol

We want to talk to you!

The Public Health Institute has been hired by the Kings County Department of Public Health to conduct the Kettleman City Canvass.



We will be visiting homes in Kettleman City
Wednesday, April 5, 2017 to Saturday, April 8, 2017



- ◆ We will ask adults at each home about issues that are important to them.
- ◆ Your input is very important! Participation is voluntary, and results will be shared with the Kings County Department of Public Health.
- ◆ Interviews will be conducted in English or Spanish by Public Health Institute staff.
- ◆ For more information:
www.s-r-g.org/KettlemanCity



Phone:
(559) 406-9688
E-mail:
KettlemanCitySRG@gmail.com
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Kettleman City Community Canvass Survey Instrument

Kettleman City Community Canvass

Survey Instrument

March 2017

Survey Research Group

Public Health Institute

Sacramento, California

INTRO

PHI Data Collector: Hello, my name is _____, and I'm from the Public Health Institute.

Recolectora de datos de PHI: Hola, mi nombre es _____, y soy del Instituto de Salud Pública.

This week, we are visiting all households in Kettleman City to speak with interested adults about their priorities. We are here to invite you to participate. The survey takes approximately 15 minutes to complete. *Esta semana estaremos visitando todos los hogares en Kettleman City para hablar con adultos interesados sobre sus prioridades comunitarias. La encuesta tarda aproximadamente 15 minutos en completarse.*

Do you have any questions for me about this project?

¿Tiene alguna pregunta para mí acerca de este proyecto?

INFORMED CONSENT

I am required to read the following paragraph to you, after which I will ask you to agree or disagree to participate in the interview.

CONSENTIMIENTO INFORMADO

Estoy obligado a leer el siguiente párrafo, después de lo cual le preguntaré si está de acuerdo o no está de acuerdo en participar en la entrevista.

We are visiting all households in Kettleman City to see if adult residents are interested in completing an interview this week. No individual responses will be reported. The results we collect and the community concerns and priorities we identify will be made available to the residents of Kettleman City, as well as the Kings County Department of Public Health. The risks associated with this survey include feeling uncomfortable about answering questions about yourself or your family members, and the risk of the data confidentiality being breached. To minimize these risks, the survey is voluntary, and we have several security measures in place to ensure that all collected data is kept secure and confidential. We will not collect your name. You can stop the interview at any time, and if there are any questions that make you uncomfortable or that you do not want to answer, we can skip them. We will be collecting responses for up to nine open-ended questions with a voice recorder. If you prefer not to have your voice recorded, we will skip those questions. The other questions on the survey will not be recorded. I will tell you when I am turning on the recorder, and I will tell you when I am turning off the recorder. Refusing to complete a survey or answer any question on a survey will involve no penalty or loss of benefits to which you are otherwise entitled. While there are no direct benefits to completing a survey, some residents may see value in having a survey like this to voice confidential concerns and provide feedback to the county health department.

Estamos visitando todos los hogares en Kettleman City para ver si los residentes adultos están interesados en completar una entrevista esta semana. No reportaremos respuestas individuales. Los resultados que obtengamos y las preocupaciones y prioridades de la comunidad que identifiquemos se pondrán a disposición de los residentes de Kettleman City, así como a el Departamento de Salud Pública del condado de Kings. Los riesgos asociados con esta encuesta incluyen sentirse incómodo acerca de responder a las preguntas sobre usted o los miembros de su familia, y el riesgo de vulnerar la confidencialidad de los datos. Para minimizar estos riesgos, la encuesta es voluntaria y confidencial, y tenemos varias medidas de seguridad para garantizar que todos los datos acumulados se mantengan seguros y confidenciales. No preguntaremos su nombre. Usted puede parar la

entrevista en cualquier momento, y si hay alguna pregunta que le hace sentir incómodo(a) o que no desea responder, podemos pasarlas. Con su permiso, grabaré o sus respuestas a preguntas abiertas con una grabadora de voz. Si usted prefiere que su voz no sea grabada, pasaremos esas preguntas. Negarse a completar una encuesta no implica pena ni pérdida de beneficios a que de lo contrario tiene derecho. Mientras que no hay ningún beneficio directo por completar la encuesta, algunos residentes pueden ver beneficios en tener una encuesta como esta para expresar preocupaciones confidenciales y proporcionar comentarios al Departamento de Salud del condado.

Are you interested in completing an interview today?

¿Está usted interesado(a) en completar una entrevista hoy?

- Yes – ready to complete interview now. / *Si – Listo(a) para completar la encuesta ahora.*
- Yes – can complete interview at another time (notate time) / *Si – puede completar la encuesta en otro momento (anotar el tiempo).*
- No “*Ok. Thank you very much for your time. Are there other adults over the age of 18 that live in this household who might be interested in completing an interview?*” / *No “Ok. Muchas gracias por su tiempo. ¿Hay otros adultos mayores de 18 años que viven en este hogar que pudieran estar interesados en completar la encuesta?*

LANGUAGE

Would you prefer to conduct the interview in English or in Spanish?

¿Prefiere usted llevar a cabo la entrevista en inglés o español?

- English
- Spanish

AGE (BRFSS, 2013, p. 25)

What is your age?

¿Cuántos años tiene usted?

Range: 18 – 150

__Enter age in years

- Don't know
- Refused

Must be at least 18 to complete a survey. Terminate interview if <18.

RESIDE

Do you currently reside in Kettleman City?

¿Reside usted actualmente en Kettleman City?

- Yes / **Si**
 - Year Round Resident (GreenAction, p. 1) / **Residente todo el año.**
 - Seasonal Resident (GreenAction, p. 1) / **Residente de temporada.**
- No / **No**
- Don't know
- Refused

YEARSRES

How long have/did you live/d in Kettleman City?

¿Cuánto tiempo tiene usted viviendo/vivió usted/ en Kettleman City?

_____ # Years

(If never lived in Kettleman City, record 0 for YEARSRES and terminate interview. Must have officially resided at some point in Kettleman City.)

GENDER (California Health Interview Survey, 2013-2014, p. 6)

(*Confirm Gender*)

Are you male or female?

¿Es usted hombre o mujer?

- Male / **Hombre**
- Female / **Mujer**
- Other / **Otro**
- Prefer not to state / **Prefiero no declarar**
- Refused

RACE (California Health Interview Survey, 2013-2014, p. 7)

Please tell me which one or more of the following you would use to describe yourself. Would you describe yourself as:

Por favor dígame cual o cuales de las siguientes usaría para describirse a usted mismo. Se describiría como:

- Latino or Hispanic / latino(a) o hispano(a)
- White / blanco(a)
- American Indian / indio(a) americano(a)
- Alaska Native / nativo(a) de Alaska
- Asian / asiático/a
- African American or Black / afroamericano(a) o negro(a)
- Native Hawaiian / nativo de Hawái
- Other Pacific Islander / Otro Islas del Pacifico
- Other (enter)

(if more than one race and ethnicity is selected)

RACEMULT (California Health Interview Survey, 2013-2014, p. 11)

Do you identify with any one race in particular?

¿Se identifica usted con alguna raza en particular?

- Yes / Si
- No / No
- Don't know

(if Yes to RACEMULT)

RACEMOST (California Health Interview Survey, 2013-2014, p. 12)

Which do you most identify with?

¿Con cuál se identifica más usted?

- Latino or Hispanic / latino(a) o hispano(a)
- White / blanco(a)
- American Indian / indio(a) americano(a)
- Alaska Native / nativo(a) de Alaska
- Asian / asiático/a
- African American or Black / afroamericano(a) o negro(a)
- Native Hawaiian / nativo de Hawái
- Other Pacific Islander / Otro Islas del Pacifico
- Other (enter)

EDUCA (BRFSS, 2013, p. 32)

What is the highest grade or year of school you completed?

¿Cuál fue el año escolar más alto que usted completó?

Read only if necessary

- Eighth grade or less / Octavo grado o menos
- Some high school (grades 9-11) / Un poco de escuela secundaria
- Grade 12 or GED certificate (High school graduate) / Grado 12 o certificado GED
- Some technical school / Un poco de escuela técnica
- Technical School Graduate / Graduado de escuela técnica
- Some College / Un poco de Universidad
- College graduate / Graduado de Universidad
- Post graduate or professional degree / Título profesional o posgraduado
- Not Applicable (never attended school or only kindergarten)
- Don't Know
- Refused

RANK (CEHAT)

We have been speaking to several people about what they think are the most important issues to the people of Kettleman City, and have summarized these issues below. We know that all these issues are important, but, we would appreciate if you could tell us which **three** issues in this list are most important to **your household**. (You will have the opportunity to discuss other issues later in the interview.)

Nosotros hemos estado hablando con varias personas sobre lo que piensan son los temas más importantes para la gente de Kettleman City, y hemos resumido estos temas a continuación. Sabemos que todos estos temas son importantes, pero le agradeceríamos si usted podría decirnos los **tres** temas de esta lista que son los más importantes para **su hogar**. (Usted tendrá la oportunidad de hablar acerca de otros temas más adelante en la entrevista.)

Show laminated list to participant. Select up to 3 responses with dry erase marker, and record in e-survey.

1. Asthma / **Asma**
2. Birth Defects / **Defectos de nacimiento**
3. Pesticides / **Pesticidas**
4. Learning Disabilities in Children / **Discapacidades de aprendizaje en niños**
5. Air Quality / **Calidad del aire**
6. Health Care / **Cobertura médica (aseguranza)**
7. Job Opportunities / **Oportunidades de empleo**
8. Cancer / **Cáncer**
9. Miscarriages / **Aborto no provocado**
10. Street Lights / **Luces en la calle**
11. Stray or Loose Dogs / **Perros callejeros**
12. Crime / **Crimen**
13. Streets (Curbs/Gutters/Sidewalks/Stoplights/Potholes) / **Calles**
(bordillos/canalones/banquetas/semáforos/baches)
14. Water Quality / **Calidad del agua**
15. Planned water treatment plant / **Planta de tratamiento de agua planificada**
16. Changing Water Rates / **Tarifas del agua variables**
17. Immigration Issues / **Temas de inmigración**

I will be recording your responses to open-ended questions with a voice recorder. Is this OK?
If yes: “Thank you. Please keep your responses to about 1 minute for open-ended questions.”
Estaré grabando sus respuestas a las preguntas abiertas con una grabadora de voz. ¿Está bien?
Si: “Gracias. Por favor mantenga sus respuestas a 1 minuto máximo para las preguntas abiertas.”

If participant refuses, record question number and say “RF” verbally into tape recorder. Continue to read questions and explain that you will be skipping them since we will not be using a voice recorder.

RANKWHY (CEHAT)

RECORD

[I am turning on the recorder] Why do you consider these three to be the most important?
{Voy a empezar la grabadora} ¿Por qué considera que estos tres son los más importantes?

[I will now pause the recorder.]
{Voy a pausar la grabadora.}

CONCERNS (CEHAT)

You said your top three concerns were _____, _____, and _____. I’m going to ask you questions about each of these three concerns.

Usted dijo que sus tres temas más importantes eran _____, _____, y _____. Voy a hacerle preguntas acerca de cada uno de estos tres temas.

TREND1ISSUE

(Dropdown menu – enter First Response)

TREND1 (National Association of County and City Officials, 2000)

Is the condition or risk changing? How?

¿La condición o el riesgo está cambiando? ¿Como?

- Improving / *Mejorando*
- Staying the same / *Manteniéndose igual*
- Worsening / *Empeorando*
- Don't Know/Not Sure
- Refused

OVERALL1 (National Association of County and City Officials, 2000)

Is this issue/risk of high, medium or low concern?

¿Es este tema /riesgo de alta, media, o baja preocupación?

- High concern / *Alta preocupación*
- Medium concern / *Mediana preocupación*
- Low concern / *Baja preocupación*
- Don't Know/Not Sure
- Refused

TREND1SOL (National Association of County and City Officials, 2000)

RECORD

[I am turning on the recorder] How would you solve this issue?

{ *Voy a empezar la grabadora* } ¿Cómo solucionaría usted este tema?

RECORDED RESPONSE: _____

[I will now pause the recorder]

{ *Voy a pausar la grabadora* }

TREND2ISSUE

(Dropdown menu – enter Second Response)

TREND2 (National Association of County and City Officials, 2000)

Is the condition or risk changing? How?

¿La condición o el riesgo está cambiando? ¿Como?

- Improving / Mejorando
- Staying the same / Manteniéndose igual
- Worsening / Empeorando
- Don't Know/Not Sure
- Refused

OVERALL2 (National Association of County and City Officials, 2000)

Is this issue/risk of high, medium or low concern?

¿Es este tema/riesgo de alta, media, o baja preocupación?

- High concern / Alta preocupación
- Medium concern / Mediana preocupación
- Low concern / Baja preocupación
- Don't Know/Not Sure
- Refused

TREND2SOL (National Association of County and City Officials, 2000)

RECORD

[I am turning on the recorder] How would you solve this issue?

{Voy a empezar la grabadora} ¿Cómo solucionaría usted este tema?

RECORDED RESPONSE: _____

[I will now pause the recorder]

{Voy a pausar la grabadora}

TREND3ISSUE

(Dropdown menu – enter Third Response)

TREND3 (National Association of County and City Officials, 2000)

Is the condition or risk changing? How?

¿La condición o el riesgo está cambiando? ¿Como?

- Improving / **Mejorando**
- Staying the same / **Manteniéndose igual**
- Worsening / **Empeorando**
- Don't Know/Not Sure
- Refused

OVERALL3 (National Association of County and City Officials, 2000)

Is this issue/risk of high, medium or low concern?

¿Es este tema/riesgo de alta, media, o baja preocupación?

- High concern / **Alta preocupación**
- Medium concern / **Mediana preocupación**
- Low concern / **Baja preocupación**
- Don't Know/Not Sure
- Refused

TREND3SOL (National Association of County and City Officials, 2000)

RECORD

[I will now start the recorder] How would you solve this issue?

{Voy a empezar la grabadora} ¿Cómo solucionaría usted este tema?

RECORDED RESPONSE: _____

[I will now pause the recorder]

{Voy a pausar la grabadora}

Take laminated sheet back from participant.

RANKOTHER (CEHAT)

Is there an issue that concerns your household, but was not listed above?

Hay un tema que afecta a su hogar, pero no estaba en la lista anterior?

- Yes / Si
- No / No
- Don't Know
- Refused

(if Yes to RANKOTHER)

RANKOTHLIST (CEHAT)

What is that issue?

¿Cuál es el tema?

Enter Response: _____

- Don't Know
- Refused

RANKOTHWHY

RECORD

I will now start the recorder] Why do you consider this to be important? (CEHAT)

{ Voy a empezar la grabadora } ¿Por qué considera esto importante?

RECORDED RESPONSE: _____

- Don't Know
- Refused

My last questions are about what it's like to live in Kettleman City.
Mis últimas preguntas son acerca de como se siente vivir en Kettleman City.

LIKEKC
RECORD

[I will now record the next four questions and will let you know when I am done recording.]

What do you like most about living in Kettleman City?

{Voy a grabar las próximas cuatro preguntas y le dire cuando pare the grabar.}

¿Qué es lo que más le gusta de vivir en Kettleman City?

RECORDED RESPONSE: _____

- Don't Know
- Refused

HARDKC
RECORD

What do you feel is hardest about living in Kettleman City?

¿Qué piensa usted que es lo más difícil de vivir en Kettleman City?

RECORDED RESPONSE: _____

- Don't Know
- Refused

HEALTHDEPT (Food Sovereignty Assessment Tool, p. 58)

RECORD

If you could tell the county health department one thing about living in Kettleman City, what would you tell them?

Si usted pudiera decirle al Departamento de Salud del condado una cosa acerca de vivir en Kettleman City, ¿qué diría?

RECORDED RESPONSE: _____

- Don't Know
- Refused

PRIMSOUR

Where do you get your information on health and environmental issues in your community? Check all that apply.

¿Dónde obtiene usted la información sobre la salud y temas del medio ambiente en su comunidad? Marque todas las que aplican.

- Family / Familia
- Friends / Amigos
- Newsletters / Boletín informativo
- Internet / Internet
- Television / Televisión
- Radio / Radio
- School / Escuela
- Work / Trabajo
- Church / Iglesia
- Clinic / Clínica
- Medical professional (doctor, nurse, etc.) / Professional Medico (doctor, enfermera, etc.)
- Promotoras
- The County / El condado
- The State / El estado

RECEIVE

How do you like to receive information on health and environmental issues in your community?

¿Cómo le gustaría recibir información sobre la salud y los temas ambientales de su comunidad?

- Word of Mouth from a community member, family member, friend, church leader, etc. / Por boca de otros como un miembro de la comunidad, un miembro de la familia, amigo(a), líder de la iglesia, etc.
- Word of Mouth from a county or state or medical employee / Por boca de un empleado del condado o estado, o un empleado médico.
- Radio / Radio
- Internet / Internet
- Handouts – newspapers, brochures, magazine / Folletos – periódico, volantes, revistas
- Television / Televisión

ELSE

Those are all of my questions. Is there anything else you'd like to tell us?

Esas son todas mis preguntas. ¿Hay algo más que quisiera decirnos?

- Yes (Record Response) / Si
- No / No
- Don't know
- Refuse

(if Yes to ELSE)

ELSEANSWER

RECORD

[I will now start the recorder]

{Voy a empezar la grabadora}

RECORDED RESPONSE: _____

[I will now pause the recorder]

{Voy a pausar la grabadora}

We will be providing results of this community follow up survey to Kettleman City residents to access. How would you like to receive results? Please check all that apply.

Vamos a compartir los resultados de esta encuesta de seguimiento comunitario a los residentes de Kettleman City. ¿Cómo le gustaría a usted recibir los resultados? Marque todas las que apliquen.

- View on the website / [Ver en el sitio web](#)
- Receive alert via email or text (provide info) / [Recibir un aviso a través de un correo electrónico o texto](#)
- Email me a copy (provide email) / [Enviarme una copia por correo electrónico](#)
- Mail me a copy (provide address) / [Enviarme por correo una copia](#)
- Send me a text message link to the website / [Enviarme un mensaje de texto con enlace a la página web](#)
- Attend a community forum to learn about the results / [Asistir a un foro comunitario para aprender acerca de los resultados](#)
- I don't want any results. / [No quiero ningún resultado](#)

THANKYOU

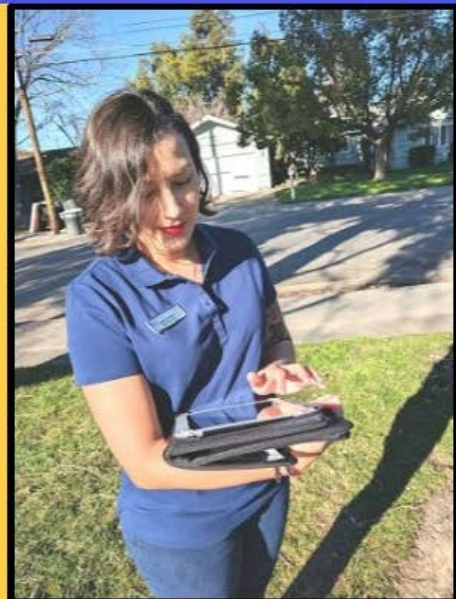
Thank you so much for your time. **[HAND PARTICIPANT THANK-YOU CARD]**. Before we leave, are there other adults in your household that would be interested in completing an interview?

Muchas gracias por su tiempo. Antes de irnos, ¿hay otros adultos en el hogar que quisieran completar una entrevista?

Thank you for participating in the
Kettleman City Canvass!

*¡Gracias por participar en la encuesta
sobre la comunidad de Kettleman City!*

Thank you!
¡Gracias!



Phone / Teléfono: (559) 406-9688

E-mail / Correo Electrónico: KettlemanCitySRG@gmail.com

Website / Sitio Web: www.s-r-g.org/KettlemanCity

The Kettleman City Community Interview is a study identifying community concerns and strengths in Kettleman City, California. A potential benefit to residents after completing this survey include the opportunity to provide feedback to the Kings County Department of Public Health regarding community priorities. Participants may experience emotional discomfort talking about community health and environmental issues. However, we believe this risk will be minimal. All data collectors are trained in protocols for maintaining confidentiality of survey responses. Data are collected on password protected tablets and stored on encrypted secure servers. Confidential information will not be disclosed to persons outside of PHI. Participants may discontinue participation at any time without penalty or loss of benefits to which they are otherwise entitled.

La encuesta sobre la comunidad de Kettleman City es un estudio para identificar las preocupaciones y fortalezas de la comunidad en Kettleman City. Un beneficio potencial a los residentes después de completar esta encuesta incluye la oportunidad de proveer retroalimentación al Departamento de Salud del condado de Kings acerca de las prioridades de la comunidad. Es posible que los participantes experimenten inquietud emocional hablando de la salud de la comunidad y cuestiones ambientales. Sin embargo, creemos que este riesgo será mínimo. Todos los recolectores de datos están capacitados en protocolos para mantener la confidencialidad de las respuestas de la encuesta. Los datos se recopilan en tabletas protegidas por contraseña y almacenados en servidores seguros cifrados. Información confidencial no será revelada a personas fuera de PHI. Los participantes pueden parar de participar en cualquier momento sin penalización o pérdida de beneficios a los que tienen derecho a reclamar.

For questions on this study, you can contact the principal investigator:
Para preguntas sobre este estudio, puede ponerse en contacto con la investigadora principal:

Dr. Marta Induni, PhD
(916) 779-0300
minduni@s-r-g.org
Sacramento, CA



¡Conoce a las Recolectoras de Datos!

Foro Comunitario para dar la Bienvenida
Encuesta sobre la comunidad de Kettleman City!

Estación de
Bomberos #9

85 Brown St. Kettleman City

Martes
4 de abril, 2017
5:30 - 6:30 pm



Meet the Data Collectors!

Community Forum Meet-and-Greet
Kettleman City Canvass!

Fire Station #9

85 Brown St. Kettleman City

Tuesday
April 4th, 2017
5:30 - 6:30 pm



¡Estás invitado!

¡Una presentación de los resultados de la Encuesta de Seguimiento de la Comunidad de Kettleman City será compartida con cualquier residente interesado!

¡Todos son bienvenidos a asistir!

Biblioteca de Kettleman City
104 Becky Pease St.
miércoles
27 de junio, 2017
3:00 pm - 4:00 pm

Contáctenos:
(559) 406-9688
KettlemanCitySRG@gmail.com
www.s-r-g.org/Kettleman-espanol



You're Invited!

A presentation of the results from the Kettleman City Canvass will be shared with any interested resident!

Everyone is welcome to attend!

Kettleman City Branch Library
104 Becky Pease St.
Wednesday
June 27th, 2017
3:00 pm - 4:00 pm

Contact Information:
(559) 406-9688
KettlemanCitySRG@gmail.com
www.s-r-g.org/KettlemanCity



Kettleman City Community Canvass Survey – Provided List of Community Concerns

1. Asthma
2. Birth Defects
3. Pesticides
4. Learning Disabilities in Children
5. Air Quality
6. Health Care
7. Job Opportunities
8. Cancer
9. Miscarriages
10. Street Lights
11. Stray or Loose Dogs
12. Crime
13. Streets (Curbs/Gutters/Sidewalks/Stoplights/Potholes)
14. Water Quality
15. Planned water treatment plant
16. Changing Water Rates
17. Immigration Issues