Youth for Clean Air
Research Report

Project funded by a grant from the Bay Area Air Quality Management District
Description of Organization

Mission:

The Mandela High School's Youth for Clean Air program mission of the 2009/2010 school year is to educate the community and truck drivers on diesel air pollution in our community.

About us:

The purpose of the Youth for Clean Air team is to identify the community's knowledge on air quality issues and to educate them about diesel trucks and the harm they can cause. Our program teaches other youth about air pollution issues and how to take action and come up with solutions. The Youth for Clean Air team receives support from the following organizations: Earth Team, The Rose Foundation, and Youth in Focus.

Student Researchers:

Carlos Barrios Guerrero
Yesica Alejandre
Angie Bashful
Eunice Medina
Jennifer Gonzalez
Jim Vo
Jose Chavez
Miguel Alejandro
Miguel Rocha
Stephanie Berrospe

Youth for Clean Air Instructors:

Jill Jacobson
Myesha Williams
Facilitator Statement

EarthTeam and the Rose Foundation chose to initiate this project at Mandela High School in the hopes to address the needs of teenagers and their families living in Alameda County who are disproportionately affected by asthma and air pollution by engaging them in action research. By providing health science investigative skills for assessing and improving air quality, and sharing such evidence with the community and state legislature, we aim to empower the students to continue as leaders addressing their communities health and environmental problems.

EarthTeam- Something’s in the Air project

Youth for Clean Air is one of the programs of the Something’s in the Air project of EarthTeam. EarthTeam’s mission is to create a new generation of environmental stewards and leaders by introducing into the classroom and the community environmental experiences that inspire dedication to a healthy environment. Something’s in the Air is an air pollution and asthma research project for teens in the East Bay. This program aims to educate and empower high school students in the East Bay through a curriculum project. This year, we expanded our program to pilot the Youth for Clean Air program at Mandela High School.

The Rose Foundation’s New Voices are Rising project

The New Voices Are Rising project conducts environmental justice advocacy and leadership development programs with Bay Area high school students. Primary partners include several Oakland high schools and non-profit agencies. New Voices Are Rising strives to develop young leaders in low-income communities and communities of color in Alameda and Contra Costa Counties by helping young people gain the skills and experience in civic engagement required to tackle the many problems - especially environmental health problems - that disproportionately affect their communities. In so doing, the project seeks to reduce pollution - especially diesel air pollution and associated particulates, which severely affect both human health and the health of the San Francisco Bay.

Youth in Focus

The guiding vision of Youth in Focus is of a world in which youth and adults share knowledge and power to create a more just, sustainable, and democratic society. Since 1990 YIF has pursued this vision by providing training, consulting and coaching support in youth-led action research (Youth-REP) to underrepresented youth and adult allies working for positive change. Youth-led action research brings young people’s energy and information to bear upon social and organizational challenges. Young people play lead roles in designing, doing, and following up on research or evaluation projects that serve to change or initiate a program, organization, community initiative, organizing campaign, or policy that affects them and their peers.
Student REsearchers

Eunice Medina

Angie Bashful

Carlos Barrios

Miguel Alejandro

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Biographies

My name is Eunice Medina. I'm currently a junior at Mandela High School and I am in youth for clean air as my internship. I now can make a change while I'm in this program. I decided to participate in Youth for Clean Air because I wanted to learn about air pollution in my community.

My name is Anjanette Bashful and I'm an 11th grader at Mandela High School. I've always loved nature and animals, so this program instantly got my attention. It's about clearing the air and keeping it safe to breathe and I want to be able to say I am a part of that effort. In the future, I would like to pursue a career in helping the earth, such as installing solar panels or finding ways to save energy and use alternative sources to spare our health and the environment. This program is just one step in the right direction for me.

My name is Carlos Barrios. I am 16th years old and currently a junior attending Mandela High. I am also very passionate about soccer. I play a goalkeeper. The most important thing right now for me is to graduate from high school and show my family I am capable of graduating. I decided to participate in Youth for Clean Air because I wanted to learn about air pollution in my community. I also like to participate in programs to stay out of violence and the dangerous

Miguel Alejandre is an 11th grade student at Mandela High School who participated in the Youth for Clean Air internship.

My name is Miguel Rocha. I am a junior at Mandela High. There are many things that are important to me, like my family, my schoolwork, and most of all my future. The reason why I participated Youth for Clean Air was because I knew it will be a good opportunity for me to take action and be involve for my community and environment; also this program was also good for me to boost up my skills, including resume for college and job application. Which I am very honored to receive this opportunity for joining the organization of Youth for Clean Air.

My name is Yessica Alejandre and I am 17 years old. I am in the 11th grade at Mandela High. I am a very shy and outgoing person. I like to play soccer, use the computer and meet new people. For my age, I am a busy person with many things to do. I participate in many programs like Youth for Clean Air and Youth and Government. In addition, I am on the Fremont's Girls Soccer team. I go to church, take care of my family and I go to school. During my summer, I go to Holy Names University for a college program called Upward Bound and participate in college tours. My main goal is to go to college and become a pediatrician. I want to be able to be someone in life and take care of my family.

My name is Jose Chavez and I am 16 years old. I am currently a junior at Mandela High School. I am part of the Youth for Clean Air internship which is a group of young people who try to fix community air quality problems. My role in this program is to try to come up with ideas of how to clean the air around my community. The things I like to do in my spare time are play soccer with my friends.
I am Jennifer Gonzales. I am Latina. I like to learn new things and get good skills. I am in the 11th grade and I go to Mandela High. My mom is very special and important to me because she always supports me, helps me out when I need it the most and she gives me good advice. I participated in this project because I wanted to learn more about pollution and how we can help stop pollution everywhere. I like to help my community. I speak two languages, Spanish and English. I like to motivate other people and help them out.

My name is Jim Vo. I am a shy person but not afraid to speak. I am in 11th grade and something that is important to me is the future. I see all the problems and I wish to change it. This is one of the reasons I participated in the YCA program, to take a step to do something for my community. Even though I am still a youth, I can make a drastic change towards the future, a cleaner earth.

My name is Stephanie Berrospe and I go to Mandela High School in the 11th grade. This year I have learned about diesel trucks and the emissions they produce. I am an outspoken person. I like to debate about certain things that would help change point of views. I also play soccer for my school ever since I was in 3rd grade. My major interest would be helping people and that is one of the reasons I wanted to join Youth for Clean Air. I knew that by informing everyone about the damages in the world, they would take action and try to have a better world to live in.

Facilitators Biographies;

Myesha Williams is the program associate of the New Voices are Rising Project. She was born and raised in Oakland, where she returned after studying and organizing in Southern California and Seattle, Washington. She has a B.A. and a Masters of Social Work in Social Welfare, with a focus on community organizing and public policy. Before joining the Rose Foundation, she worked with Critical Resistance Oakland and Californians United for a Responsible Budget (CURB) on issues such as community centered policy advocacy, the state budget, coalition building, and trying to end the prison industrial complex. Her recent coalition building work is where her interest in Environmental Justice was born. She is excited about teaching, learning, organizing and advocating for policy with Bay Area youth in the place that she loves.

Jillian Jacobson is the Program Director of the Something’s in the Air and Youth for Clean Air project of EarthTeam. Jillian moved to California in 2003 from Chicago, IL where she received her B.A. in documentary filmmaking from Columbia College Chicago. Her interest in social and environmental justice issues led her to pursue a career as an environmental educator and group facilitator. Before EarthTeam Jillian worked as the Education Specialist for Save The Bay, coordinating summer programs, creating curriculum and facilitating volunteer ecological restoration programs and science based canoe trips on the SF Bay. She has also worked as an educator for the Student Conservation Association, Outward Bound, Camp Highland Outdoor Science School, Mendocino Woodlands Outdoor Science School, and Colvig Silver Camps. She is excited about youth leadership and exploring ways to get youth involved in the political process.
Executive Summary

Our Research Question Was....

How can we educate our community and diesel truck drivers to reduce pollution from truck routes in order to have a safe environment for everyone?

ISSUES: The major issues that we wanted to address were to identify the knowledge level of the community about diesel trucks, air pollution, health issues and air reduction strategies.

Now that we have this information, we hope to help reduce air pollution and inform the community by presenting air quality projects so that they will be well informed and take action in reducing air pollution.

We chose this issue because diesel pollution has become a major cause of air pollution and it is important to let other people know that diesel emissions cause pollution in our community. It was important that we did this research rather than adults because we feel that youth should take a stand to shape their future.

We decided to distribute our surveys at school, outside of Mi Pueblo, Smart and Final, and by the Fruitvale Bart Station. We wanted to know the opinions from the youth at school as well as the community around Mandela High. All of these places are close to areas polluted from diesel trucks. Once we collected the surveys, we analyzed the data and checked to see what findings we had so that we could complete our final report.
Methodology

We have 10 researchers on this Youth for Clean Air team. In order to be on the team, we were required to complete an application and then we interviewed for the position with the Youth for Clean Air Instructors.

We met every Wednesday and some Saturdays over the school year 2009-2010. We chose our research question together through a brainstorming process over a series of meetings. First, we chose sub questions, and then we came up with a thesis that explained our area of research.

The information that we collected in our surveys to help us look at the issue included the statistics of how many people had asthma in different parts of our community. We were interested because we wanted to try to reduce asthma in our community. We collected information from our surveys that provided adequate conclusions to our research questions. We asked questions to determine how well people were educated about the truck routes in our community.

We decided on our research question by first choosing a set of sub questions that were interesting to us and then we combined the sub questions to make our big research question. We chose surveys because it was the easiest way to ask our questions to the students and community and analyze our results. We selected surveys through process of elimination of other research tools. We collected 285 surveys!

We select our sample at random in the area we chose to distribute our surveys. We did the surveys at the Fruitvale Bart station, Mi Pueblo Supermarket and Smart & Final.
TRUCK ROUTES SURROUNDING MANDELA HIGH SCHOOL:

Truck Routes are the roads that are highlighted.
Data Analysis

Key Findings are listed below:

Finding #1:

People say that diesel emissions cause harm to your health, yet not everyone knows that it could cause an asthma attack.

* 80.2% say diesel trucks cause harm to your health
* 37.6% say diesel emissions trigger an asthma attack.
* 63.2% say truck drivers are exposed to asthma.
Finding #2

Most people stated that the top two triggers for an asthma attack are dust and pollen.

* Several people said that they do not know about health problems related to trucks.

* Our survey asked what they thought was a known trigger for asthma attacks. 53% said dust, and 43.1% said pollen.

* 37.6% of the people said that diesel emissions are the least trigger for an asthma attack.
Finding #3

A significant number of students miss school due to lung-related illnesses.

* 20.2% of students miss school because of lung-related illnesses
* 5,042 total missed school days in the Bay Area due to diesel emissions
* Several students stated they miss school because of asthma
Finding # 4

Most people say that it is very important to reduce air pollution caused by diesel trucks, but they are not well educated about the topic, however, the students seem the most interested & want to learn about air pollution.

* 71.4% say they care about pollution in the community
* 87.5% say they want to help reduce air pollution
* 72.9% people said “yes” it is very important to reduce diesel emissions from trucks
Finding # 5

Most Hispanics and African Americans who live along the truck routes are unaware of them.

* 70% of African Americans live in East Oakland and more than half of these say they see trucks in their neighborhood often.
* 51.9% of Latinos live in those areas where there are truck routes
* 54.4% of Latinos say they see trucks in their neighborhood once or more times a day

Do you live along a truck route?
Limitations

Limitations: We could have interviewed diesel truck drivers. We could have had a larger distributing radius of the surveys. We could have organized a workshop for those interested in learning more about diesel truck emissions. We could have been more organized if we had more time in the school year.

Lessons Learned

Your first findings can lead up to even more solidified results with proper analysis. One finding is not enough to prove a point, so two or more may need to be created. We learned how to work together as a team and make a research question, survey and complete to project. We learned how to analyze our findings.
Summary

Based on our data and findings we make the following recommendations:

Recommendation # 1

People in our community need educational awareness about the location of truck routes.
Recommendation # 2:

People need to know that Diesel Emissions can also cause an asthma attack.
**Recommendation #3**

Most people know that reducing air pollution caused by diesel is very important although, they really do not know why, but they are interested in learning. They want to help and take part in making our environment clean and safe to breathe in. We need more programs like youth for clean air to educate students.
NEXT STEPS

Some next steps that we see because of this project are (including recommendations for future research):

1. What we will do in the future is to teach everyone at the exhibition night about the truck routes and where they are located.
2. We will also teach the community during the exhibition night that diesel emissions can also cause asthma.
3. We will also teach our fellow classmates how to reduce emissions in their lives at home.

The most valuable part of this project was giving out the surveys to our community, finding our criteria and putting them together to educate our community. Helping us to speak out because many of us are every shy when it comes to talking to strangers.
Thank you and Acknowledgement:
Youth for Clean Air would like to thank the Bay Area Air Quality Management District for funding our project. We would like to thank Jill Ratner, President of the Rose Foundation for helping to educate us about environmental justice, and helping to organize our field trips to the California Air Resources Board, and our rally in support of AB 32. We would like to thank Levana Saxon and Tony Robinson of Youth in Focus for sharing their skills, knowledge and bringing great energy to our learning process. Thank you to Mrs. Arabia for supporting us throughout the year and encouraging us to succeed and do our best. Finally, we would like to thank Jillian Jacobson from Earth Team and Myesha Williams from New Voices are Rising for running and supporting the youth for clean air group.

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