

Using Community-based Approaches to Assess the Needs and Assets of a Community Post-disaster: The Story of Project R.I.S.E

Presented at the 2012 American Public Health Association Annual Conference
San Francisco, CA

Team Members

- * **Lucy Annang, University of South Carolina**
- * Sacoby Wilson, University of Maryland
- * Cornelius, Evangeline, University of South Carolina
- * Carlos, Bethany, University of South Carolina
- * **Louisiana Wright Sanders, GRACE Study Center**
- * **Tina Bevington, GRACE Study Center**
- * Erik Svendsen, Tulane University
- * Amy Brock Martin, University of South Carolina
- * Julia Ball, University of South Carolina

The project described is supported by Award Number R21ES017239 from the National Institute of Environmental Health Sciences. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Environmental Health Sciences or the National Institutes of Health.

Presentation Outline

- * Description of Setting
- * Community Partners
- * Photovoice Background & Methodology
- * Results
- * Summary of Findings/Discussion
- * Dissemination Plan
- * Limitations & Strengths
- * Conclusions

The Location



Graniteville, South Carolina

- * Unincorporated town in Aiken County (50 miles southeast of Columbia, SC)
- * Population: 2,614
- * Median Household Income (county): \$41,522
- * Median Age: 35 years
- * Racial/ethnic distribution:
 - * 65% White, 28.6% Black, 5.9% Hispanic
- * GVW area population ~7,000

THE DISASTER

Sunday, January 6, 2005, 2:39 a.m.

- * An approaching train collided with a cart parked on the tracks near Avondale Mills and derailed
- * The contents of the ruptured train car contaminated the air with 60 tons chlorine gas
- * Emergency evacuation of 5400 residents within a one-mile radius
- * Nine recorded attributed deaths and at least 550 residents required medical assistance







Our Partners

- * 12 community advisory board members
- * Graniteville Community Coalition
- * Local churches, businesses, media, and civic organizations
- * GRACE Study Team

THE PHOTOVOICE APPROACH

Photovoice Defined

- * A qualitative method of inquiry
- * Individuals take photographs based on a specific topic
- * Discussion of the photographs in a group setting
- * Enables individuals to record and reflect their community's needs and assets
- * Promotes dialogue about important issues through group discussion and photographs

The SHOWeD Method

- * What do you **S**ee happening in the photograph?
- * What is really **H**appening in the photograph?
- * How does this photograph relate to **O**ur lives and others in the community?
- * **W**hy do these issues exist in the Graniteville community?
- * What can we **D**o about these issues?

Participants

Eligibility criteria

- * Currently live in Graniteville or the surrounding community
- * Lived in the region at the time of the disaster
- * Ages 18 and older

Recruitment strategies

- * Word of mouth
- * CAB
- * Community Investigators
- * Local print media
- * Community events
- * Facebook

Procedure

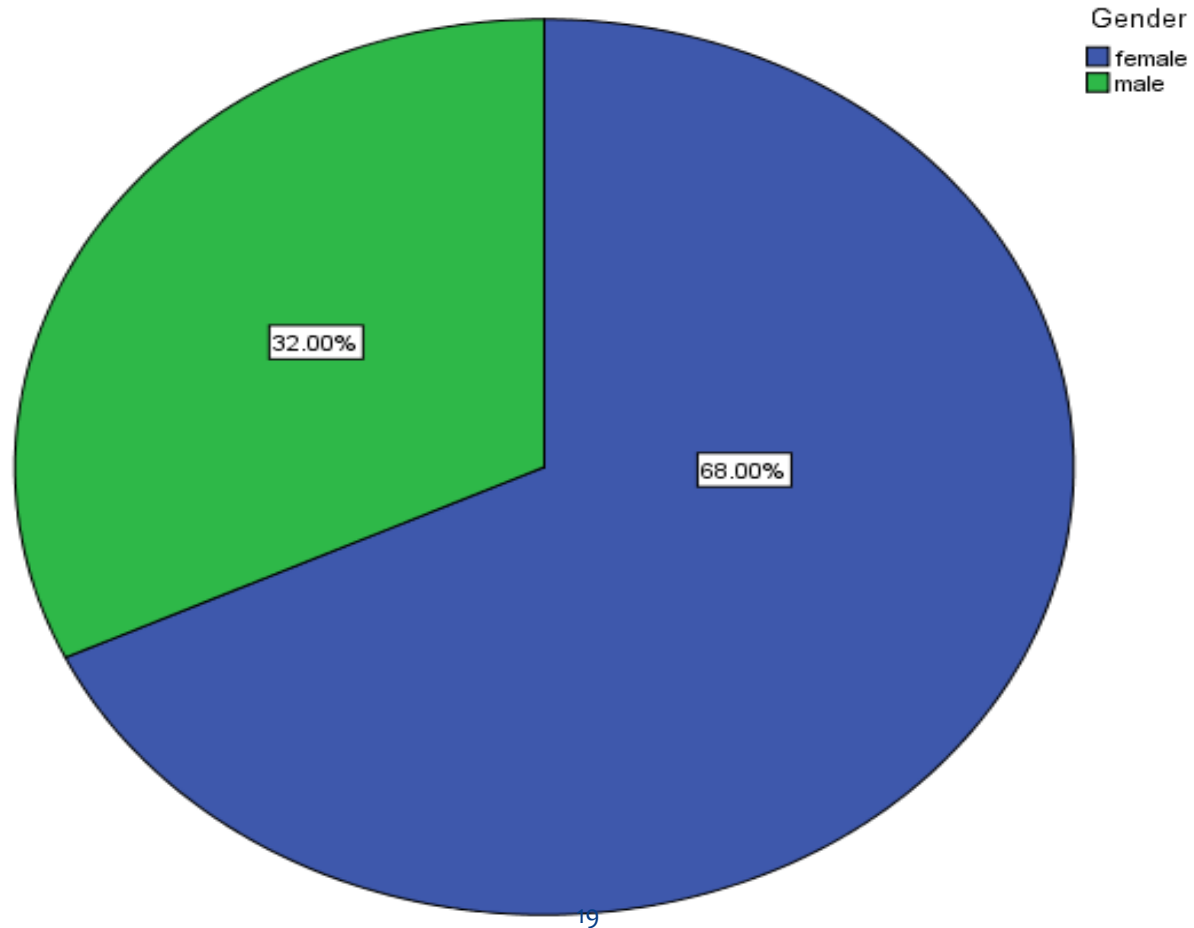
- * Three to five 90-minute sessions
- * Participants received information about photography, photography ethics, and ground rules
- * Each participant was given a question and was allowed 5 days to take their pictures
- * The participants submitted 2-3 pictures per PV question
- * After the discussion the participants determined major themes represented in the pictures
- * \$60 incentive
- * IRB approved

Photovoice Questions

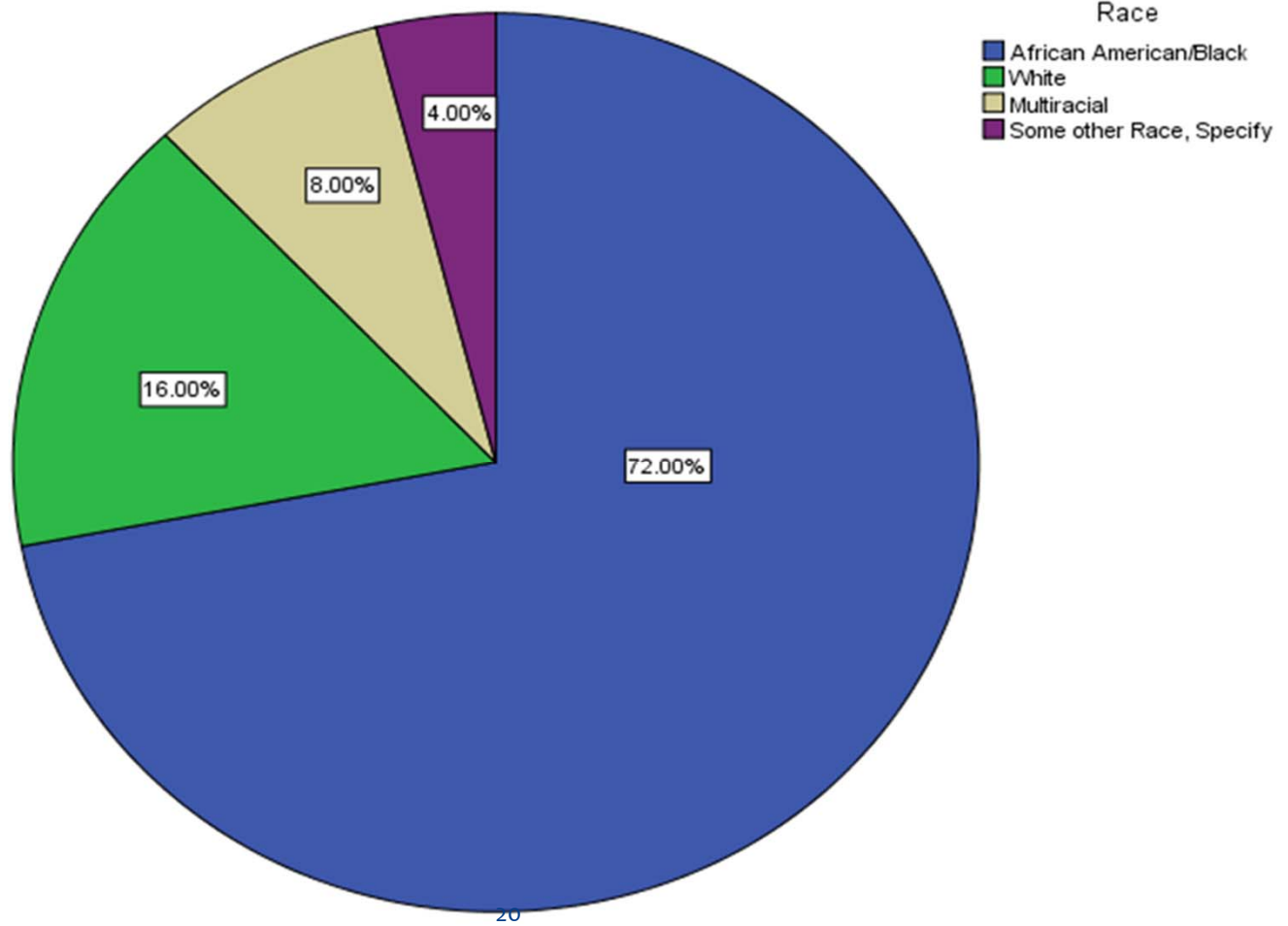
1. How did the train disaster affect your ***health*** and the ***health of your community***?
2. How did the train disaster affect your ***quality of life***?
3. How did the train disaster affect your ***access to health care***?

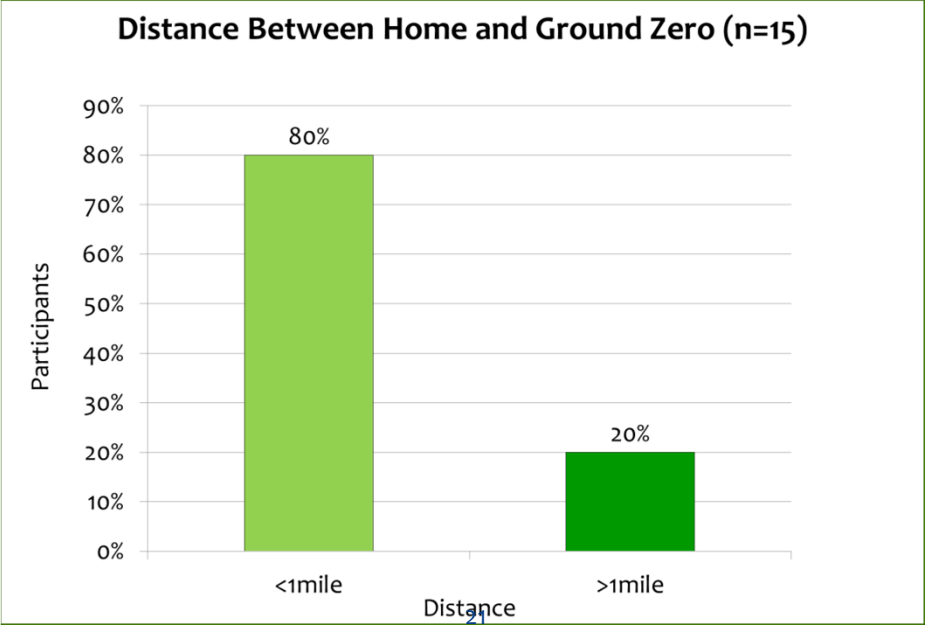
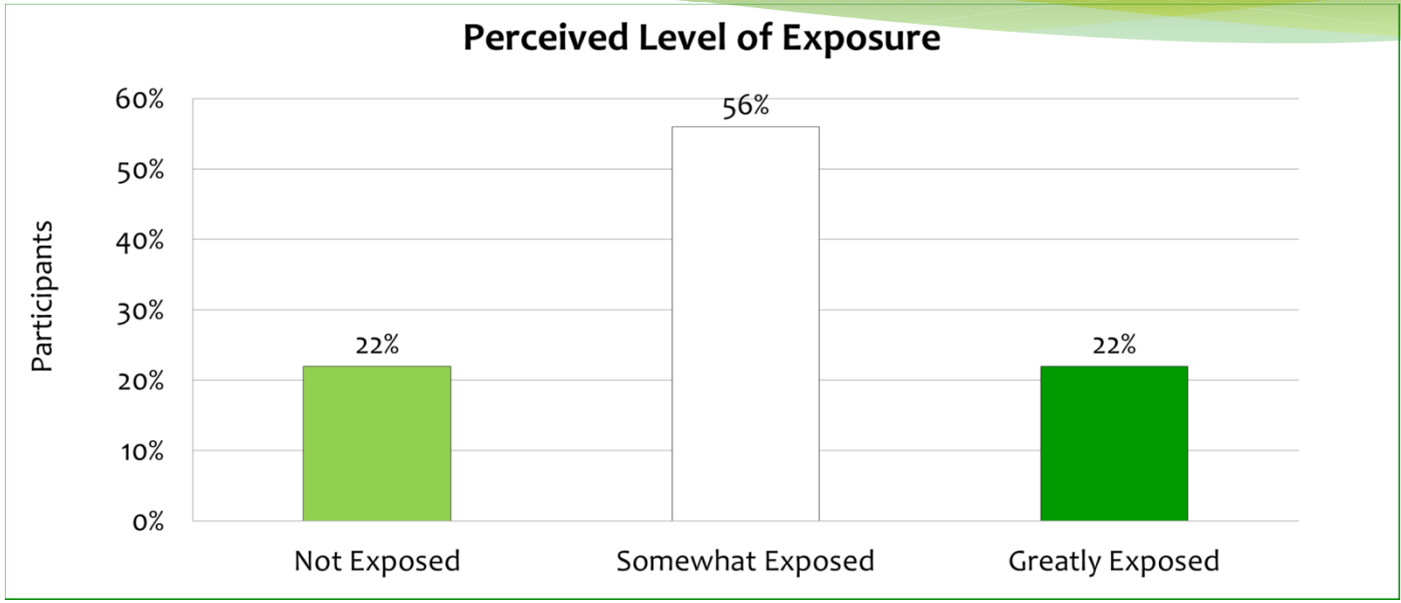
RESULTS: Demographic Characteristics

Gender



Race





RESULTS: Photovoice Themes

How did the train disaster affect your health and the health of your community?

- **Physical environment**
- **Respiratory complications**
- **Emotional distress**
- **Loss of life**
- **Improvements**

Physical Environment



If it (chlorine) can do that to the tree, imagine what it is doing to me.



This is better picture of the water and how the trees and vegetation became contaminated. There are no more fish... no more fishing tournament.

Respiratory Complications



...medicine I wasn't on before train accident. I am having to pay \$30 for that medicine...



My asthma pump... after the train wreck I had my first asthma attack. Now I walk around with it just in case I have another asthma attack... I didn't have breathing problems before the train wreck... have free pumps for everybody.

Emotional Distress



This is where the steam plant stood. I think the very worst thing that I saw... when Dateline did their piece. They had pictures and I saw my cousin's body lying at the bottom of the thing you crawl through. They blotted out his face and then they showed his wrist watch... That's a helluva way to die!

Loss of Life

It affected my health...I still have chest pains right now...It affected the community... They got a memory stone right there of lot of people that was lost.



Those are the ones that lost their lives, minus one. There should be another one up there and I am forever going to holler about, I don't care where we at or what time we show up. I'll scream about Leonard Mathis name being on that Memorial, because he was the last one to pass away from that.

... he died that day. Left his family behind. ..Though the memorial is for those who died, you don't know how many people were affected by it ... I don't know what statistics would say... whenever you drive by its like a little niche, a cut. You can die from a thousand cuts.

Improvements



I like the changes. The train still run the rails, trees planted, and they rerouted the road, and put up arms....



I don't know what they can do about it. I hope that we can all come away from this learning something, and maybe learning forgiveness... the people that caused it.

How did the train disaster affect your quality of life?

- **Vacancies**
- **Economic decline**
- **Modernize**
- **Lack of attention**
- **Wellness and rehabilitation**

Vacancies



No one else has lived in the house since the train wreck... There is a warning sign saying do not enter... This shows things aren't really getting better.



"...It must be where everything is going on...where I first started... Now I come by, there are no cars... That was one of the best plants now its shut down. Now its just sitting there. They could buy it or put someone to work there or remodel."

Economic Decline



Aiken Road had mill traffic
... you could have yard sales.
Now it's less
traffic... messing with my
hustle.

Loss of employment due to
plant closing,



Modernize

We don't even have the little basketball tournaments... We use to have a little camp and all of that down there.

Get the word out that people are still in this town.



Lack of Attention



This is a house that was burned down and trees fell on it after the chlorine spill... Need to be torn down.

Wellness & Rehabilitation

They were going to build this health center no matter what went down... They were going to cash in on the health. Which would have been good. The unhealthy thing was all that stuff went in the ground... the trees... Health wise, put people back to work...



Family... after all this happened, this is a way of being fun and getting back to normal life... This can be a rehabilitation mechanism... fun and relaxation.

How did the train disaster affect your access to health care?

- **Use of health care facilities**
- **Evacuation route**
- **Safety**

Use of Health Care Facilities



This is the picture of the claim center where people went after the train derailment to put in claims. If you had any ailments, you went in, you put in a legal claim, but they also sent you to doctors who would help you... give you access to health care.



...giving access to healthcare, check-up and stuff, after the train wreck. I don't think... the healthcare... wouldn't had them unless the train wreck happen.

Evacuation Route



The police was right here and my brother-in-law and sister... were trying to get to their daughter, but the police was blocking the way. As soon as the police turned his head my brother-in-law just passed him.

Safety



Things can't be better if things are still rusting. So how is it safe?



We had to move because everything inside was turning. We changed the air filters and you can still smell the chlorine from the air conditioners.

ONE *PHOTO*, MANY *VOICES*

Different Perspectives

The road is closed... I don't know who decided to close it... the Graniteville community or the railroad people. How this relates to my life? It makes it inconvenient for me and my neighbors to have to drive all the way down the road to go around going where I need to go because the road is close.



This is preventing people from going across the railroad track. I think it is hazardous to have four crossings on the same road. It is mostly safety why the signs were put up. I think it helps in a way; the community is going to benefit because it will eliminate the amount of accidents that occur.

The Long Way Home

Where the water was running, from the canal, has dried up. That's the route I had to take on the way back to Graniteville...it was the only open road the police didn't have blocked off.



That's where the train actually collided with the trains that was following it. That's the thing-ma-jig...switch (arrow) that flip that railroad so that train would turn there.



This picture disturbs me greatly. The water tower is rusty. Why I wanna drink some water coming outta there?

This water tower...was white with an orangish yellow "G" for Graniteville on it. Now you see it's rusted, its faded. I have learned in the past seven years that there's very little that the people of Graniteville can do. People say we have a voice, but... We need someone to help us have a voice.



Summary of Findings/Discussion

- * More negative perceptions of impact than positive
- * Concerned with lack of economic development
- * Interest in updating and revitalizing the community to rejuvenate the physical environment
- * Physical and emotional distress ever present
- * Majority of participants enjoyed the PV process
- * Despite long-term recovery, residents continue to thrive

Dissemination

- * Community exhibit
- * Participants, family members, community leaders, and elected officials participated
- * Pictures showcased
- * Participants had the opportunity to be entered in a competition for the best picture
- * Future plans—scientific and local communities

Limitations & Strengths

- * Desire to “move on”
- * Meaning attached to talking about the disaster recovery
- * Pictures -vs- narrative
- * Small sample size
- * Changes in session format
- * Outlet
- * Small group setting
- * Commonalities
- * Dissemination celebration
- * CBPR

Conclusions

- * Disaster recovery efforts take time
- * Community-based approaches must be considered when working with underserved communities
- * Photovoice was a useful approach for determining how the community's health has been impacted post-disaster
- * It is essential to relay successful models of CBPR approaches to direct the efforts of public health practitioners and researchers

Questions/Comments

Louisiana Wright Sanders, MBA
Community Investigator
Louwright@earthlink.net

Tina Bevington
Community Investigator
Bevington1959@hotmail.com

Lucy Annang, PhD, MPH
Assistant Professor
Department of Health Promotion, Education, & Behavior
Lannang@sc.edu



UNIVERSITY OF
SOUTH CAROLINA
Arnold School of Public Health